e

LIBRARY BUREAU OF THE CENSUS







Census HD 9715 .U52 U52x 1934 [v.2] no.3 c.3

# 1982

# Census of Construction Industries

CC82-I-3

**INDUSTRY SERIES** 

# **Operative Builders**

Industry 1531



U.S. Department of Commerce BUREAU OF THE CENSUS

BUREAU OF THE CENSUS LIBRARY The publications from the 1982 Economic and Agriculture Censuses are dedicated to the memory of Shirley Kallek, Associate Director for Economic Fields. During her career at the Bureau of the Census (1955 to 1983), she continually directed efforts to improve the timeliness and accuracy of economic statistics.

# 1982

# Census of Construction Industries

CC82-1-3

**INDUSTRY SERIES** 

# **Operative Builders**

Industry 1531

Issued October 1984



**U.S. Department of Commerce** 

Malcolm Baldrige, Secretary
Clarence J. Brown, Deputy Secretary
Sidney Jones, Under Secretary for
Economic Affairs

John G. Keane,

Director



# BUREAU OF THE CENSUS John G. Keane, Director C. L. Kincannon, Deputy Director

Charles A. Waite, Associate Director for Economic Fields

John H. Berry, Assistant Director for Economic and Agriculture Censuses

> CONSTRUCTION DIVISION Leonora M. Gross, Chief

ACKNOWLEDGMENTS—Many persons participated in the various activities of the 1982 Census of Construction Industries. Primary direction of the program was performed by Shirley Kallek, Associate Director for Economic Fields (until May 1983), Charles A. Waite, her successor, and Michael G. Farrell, Assistant Director for Economic and Agriculture Censuses (until August 1984), and John H. Berry, his successor.

This report was prepared in the Construction Statistics Division under the general direction of Leonora M. Gross, Chief. Alan I. Blum, Assistant Division Chief for Industry Surveys, was responsible for the overall management of the census of construction industries. He guided the planning and implementation of the project and coordinated activities with other divisions.

A. William Visnansky supervised the preparation of this report. Barbara J. Hadden, Edward R. Glover, Otto G. Ricci, Marie Rustin-Sanhueza, and Shirley M. Baker made important contributions in such areas as developing specifications, procedures, and resolving problems.

The computer processing system was developed and coordinated under the direction of Barbara M. Walter. Richard W. Swartz made significant contributions to the planning and development of the computer programs, and Herbert S. Isham was responsible for the implementation of those programs. The computer programs were also developed and written by John Sibley, Clifford Jordan, Linda M. Mersch, Adele Cerrelli, and Dan G. Sansbury. Mary D. Brady was responsible for most of the data preparation specifications and procedures. Matthew R. Golas was responsible for the coordination with the Computer Services Division. Johnnye Pringle was responsible for production control of the computer processing. Under the direction of Jesse Pollock, Edward K. Ricketts and Dennis K. Duke developed the sampling plans, some computer processing specifications, and quality control procedures.

Systems and procedures for mailout, receipt, correspondence, data input, industry classification, other clerical processing, administrative record processing, and quality control, along with the associated electronic computer programs, were developed in the Economic Surveys Division, W. Joel Richardson, Chief.

Planning, design, review, and composition of report forms were performed in the Administrative Services Division, Robert L. Kirkland, Chief.

Publication planning, design, editorial review, composition, and printing procurement were performed in the Publications Services Division, Raymond J. Koski, Chief.

Geographic coding procedures and associated computer programs were developed in the Geography Division, Robert W. Marx, Chief.

Mailout preparation and receipt operations, clerical and analytical review activities, data keying, and geocoding review were performed in the Data Preparation Division, **Don L. Adams**, Chief.

Computer processing was performed in the Computer Services Division, C. Thomas DiNenna, Chief (until February 1984), and John E. Halterman, his successor.

Photocomposition programs for the statistical tables were developed in the Systems Support Division, Larry J. Patin, Chief (until October 1983), and Arnold E. Levin, his successor.

Special-purpose computer programs for disclosure analysis were developed in the Business Division, Gerald F. Cranford, Chief (until December 1983), and Howard N. Hamilton, his successor.

The overall planning and review of the census operations were performed by the staff of the office of the Assistant Director for Economic and Agriculture Censuses.

Special acknowledgment is also due to the many businesses whose cooperation has contributed to the publication of these data.

#### Library of Congress Cataloging in Publication Data

Census of construction industries (1982) 1982 census of construction industries.

Contents: [1] Geographic area series - [2] Industry series.

Supt. of Docs. no.: C 3.245/7: CC82-I-

1. Construction industry--United States--Statistics.
1. United States. Bureau of the Census. II. Title.
HD9715.U52C466 1984 338.4'7624'0973

83-600141

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

#### INTRODUCTION

	Page
ECONOMIC CENSUSES OVER TIME	
USES OF THE ECONOMIC CENSUSES	
AUTHORITY AND SCOPE OF THE ECONOMIC CENSUSES	
METHOD OF ACCOUNTING AND TIME COVERED	
CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND	
CLASSIFICATION	
ESTABLISHMENT BASIS OF REPORTING	V
SAMPLE DESIGN, ESTIMATION PROCEDURES, AND	
RELIABILITY OF ESTIMATES	V
CENSUS REPORT FORMS	···· VII
DATA PROCESSING	VII
GEOGRAPHIC CLASSIFICATION	···· VII
DUPLICATION IN RECEIPTS	···· VII
SPECIAL TABULATIONS	
RELATIONSHIPS OF THE ECONOMIC CENSUSES TO	• • • • • • • • • • • • • • • • •
CURRENT SURVEYS	1/111
	VIII
COMPARABILITY OF CENSUS OF CONSTRUCTION	3,711
INDUSTRIES DATA WITH OTHER DATA	
ARRREVIATIONS AND SYMBOLS	VIII

#### **ECONOMIC CENSUSES OVER TIME**

The early beginnings of America's industrial output were first measured in the United States in the 1810 Decennial Census and again in 1820, when questions on manufacturing were included with those for population. Beginning with the 1840 Decennial Census, there were enumerations of manufactures and mineral industries at 10-year intervals up to and including the year 1900 for manufactures and 1940 for mineral industries. The latter census was taken again for 1954, 1958, 1963, and 1967.

Because of the increasing dominance of manufacturing in the early 20th century, Congress directed that quinquennial censuses of manufactures be taken beginning in 1905. However, from 1919 through 1939, these censuses were conducted every 2 years. The need for war-related current surveys in the early 1940's postponed the next census of manufactures until 1948 (for 1947). That census was again taken for 1954, 1958, 1963, and 1967,

Retail and wholesale trade data were first collected in 1930, and in 1933 information on selected service industries was added to the data-collection operation. These business censuses, as they were called, were again taken for 1935, 1939 (as part of the 1940 decennial program), 1948, 1954, 1958, 1963, and 1967.

Information on construction industries was first obtained in 1930 and again for 1935 and 1939. Data for the full spectrum of construction industries were not gathered again until 1968 (for 1967).

The need for transportation data to supplement information available from existing governmental or private sources was recognized by Congress in the late 1950's and early 1960's. The census of transportation (consisting of several surveys) was first taken for 1963 and again for 1967.

Since 1967, all of the above censuses have been taken quinquennially as part of the Census Bureau's economic census program. (For the 1977 censuses, the coverage of the service

industries was broadened from "selected services" to all services, except religious organizations and private households. A total of 41 additional four-digit standard industrial classifications1 (SIC's) in 7 SIC major groups was added to the scope of the census. While most of the industries included for the first time for 1977 were covered again for 1982, some were not, i.e., hospitals; elementary and secondary schools; colleges, universities, and professional schools; junior colleges and technical institutes; labor unions and similar labor organizations; and political organizations.)

The first manufacturing census for an outlying area was conducted in Puerto Rico for the year 1909. Thereafter, with the exception of 1929, a census was taken at 10-year intervals through 1949. The first censuses of retail trade, wholesale trade, and selected service industries in Puerto Rico were conducted for 1939. These censuses also were taken for the years 1949, 1954, 1958, 1963, and 1967. A census of construction industries was first introduced in Puerto Rico for 1967. These censuses of Puerto Rico have been taken since then for the years 1972, 1977, and 1982.

Censuses of manufactures, retail trade, wholesale trade, and selected service industries were conducted in Guam and the Virgin Islands of the United States for 1958, 1963, 1967, 1972, 1977, and 1982. Censuses of mineral industries were taken in the Virgin Islands of the United States for the years 1958, 1963, and 1967 but not since that time. A census of construction industries was also undertaken in these areas for 1972, 1977, and 1982.

Retail trade, wholesale trade, selected service industries, manufacturing, and construction industries were canvassed for the first time in the Northern Mariana Islands in 1983 (for 1982).

For 1982, the economic censuses and agriculture censuses were conducted concurrently.

#### USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source for facts about the structure and functioning of the Nation's economy and provide essential information for government, business, industry, and the general public. They provide an important part of the framework for such composite measures as the gross national product, input-output measures, indexes of industrial production, and indexes measuring productivity and price levels. Information from the censuses is used to establish sampling frames and as benchmarks for current surveys of business activity, which are essential for measuring short-term economic conditions.

Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. Stock No.041-001-00066-6. 1977 Supplement. Stock No. 20402. 003-005-00176-0.

State and local governments use census data to assess business activities within their jurisdictions. The private sector uses the data to forecast general economic conditions; analyze sales performance; lay out sales territories; allocate funds for advertising; decide on locations for new plants, warehouses, or stores; and measure potential markets in terms of size, geographic areas, kinds of business, and kinds of products made or sold.

Following every census, thousands of businesses and other users purchase reports. Likewise, census facts are widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. All 1982 data are available on microfiche from the U.S. Government Printing Office and most data on computer tape from the Census Bureau. Finally, the more than 50 State Data Centers also are suppliers of economic census statistics.

### AUTHORITY AND SCOPE OF THE ECONOMIC CENSUSES

The economic censuses are required by law under title 13 of the United States Code, sections 131, 191, and 224, which directs that they be taken at 5-year intervals for the years ending in 2 and 7. The 1982 Economic Censuses covered manufacturing, mining, construction industries, retail trade, wholesale trade, service industries, and selected transportation activities. Special programs also cover minority-owned and women-owned businesses. The next economic censuses are scheduled to be taken in 1988 for the year 1987.

### METHOD OF ACCOUNTING AND TIME COVERED

For the census report, respondents could use any system of accounting by which they maintained their books. Therefore, reports could be based on cash, accrual, or completion of contract methods of accounting.

A report was supposed to cover the calendar year 1982. If that involved considerable costs, fiscal year reporting was permitted if it did not produce great differences. However, all payroll and employment figures had to be reported for the calendar year.

## CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND CLASSIFICATION

The 1982 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots as defined in the 1972 Standard Industrial Classification (SIC) Manual.¹ This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction—The SIC manual defines construction in three broad types of activity: (1) building construction by general contractors, (2) other construction by general contractors, and (3) construction by special trade contractors.

- Building construction by general contractors—General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other projects of a similar character.
- 2. Other construction by general contractors Often referred to as heavy construction contractors, these contractors are primarily engaged in the construction of highways, streets, bridges, and tunnels; docks and piers; dams and water projects; sewage collection, treatment, and disposal facilities; storm sewer systems; air fields; and other heavy construction which involves either earth moving or the erection of structures and appurtenances, other than buildings.
- Construction by special trade contractors Special trade contractors are primarily engaged in specialized construction activities such as plumbing, painting, electrical work, carpentry, etc.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Construction on their own account, for sale—Operative builders are primarily engaged in constructing buildings or other structures on their own account, acting as their own general contractor. These structures are generally sold when completed. Investment builders, primarily engaged in construction on their own account for rent or lease, were not included within the scope of the construction census.

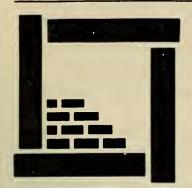
Subdividers and developers, except cemeteries—The SIC manual defines subdividers and developers, except cemeteries, as establishments engaged in subdividing real property into lots, except cemetery lots, and in developing it for resale on their own account or for others.

In this system, each establishment is assigned an industry code on the basis of its major activity.

Each establishment receiving a questionnaire was requested to report the percent of total business receipts for each kind-of-business activity engaged in during 1982. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction receipts to total business receipts was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities, but in only a few instances do the SIC industry categories take into consideration combinations of activities. An example is SIC 1711, which includes establishments primarily engaged in plumbing, heating, air conditioning, ventilation, and refrigeration work. It is necessary, however, to assign a single industry code to the establishment based on its major activity.

<sup>&#</sup>x27;Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.



# FINAL REPORT INDUSTRY SERIES

# 1982

# Census of Construction Industries

CC82-I-1 to 28 Changed October 1986

#### **CHANGE SHEET**

This revision is to table 4 in the original publications for Industry Series CC82-I-1 to 27 and table 8 for Industry Series CC82-I-28. In the stub, change 1982 (line 8) to read 1981 and 1981 (line 12) to read 1982.



Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry, but also their secondary activities.

The structure of the Standard Industrial Classification System makes it possible to classify or tabulate establishments by major group (two-digit), industry group (three-digit), or industry (four-digit) according to the degree of detail available and needed.

#### ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business which has been established for the management of more than a single project or job and is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to, estimating, bidding, scheduling, purchasing, supervising, and operating the actual construction work being conducted at one or more construction sites.

Exceptions to the "relatively permanent office" rule were that: (1) in case of joint ventures, a separate establishment report was required covering the joint venture entity even though established to undertake only a single project; and (2) to the extent that separate legal entities were set up to carry out only a given project or part of a project, then a separate establishment report was also required for each legal entity.

To the extent that several companies shared or operated out of a single office or place of business, each such legal entity engaged in construction was considered a separate establishment and each was requested to file the necessary "establishment" report covering the activities it conducted in or from that common office.

Companies with more than one construction establishment were required to submit a separate report for each such establishment operated during all or any part of 1982.

Separate construction reports were not required for each project or construction site. Aggregated information was included in the report of the construction establishment responsible for the work of the construction projects and sites.

If an establishment engaged in two or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, construction, mining, etc.) at the same place of business, it was requested to file a separate report appropriate to each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate etimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1982 gross receipts from construction activities exceeded the gross receipts from each of its other activities.

An establishment is not necessarily identical with a "company" or "enterprise," which may consist of one or more establishments. The census of construction industries figures represent a summary of records for individual establishments rather than for companies. The census tabulations, therefore, differ from those prepared on a company basis.

Construction businesses with no payroll during 1982 (nonemployers) were not required to file census reports. Collection and tabulation of data for these businesses are described in the section on "Sample Design." Foreign construction activities were not included in this census.

#### SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The firms included in the 1982 Census of Construction Industries were identified as part of an operation common to all 1982 Economic Censuses. Construction firms were divided into employers (firms with payroll) and nonemployers (firms without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on them were obtained from administrative records of other agencies of the Federal Government based on information supplied directly to the agencies.

#### **Employer Firms**

Developing the sampling frame for employer firms-This operation started with obtaining a list of all construction firms in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of firms engaged in business activities in the United States. The file contains the name, address, and form of ownerhship of each firm and also indicates whether or not the firm is subject to the Federal Insurance Contributions Act. Each firm in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each firm. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrativerecord data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer firms. However, for the 1982 Economic Censuses the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those firms which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment firms and large single-establishment firms. Thus, the 1982 Economic Census list for single-establishment employer firms was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a firm to the proper economic census, but there were a number of firms for which this information was inadequate or unavailable. A special form, NC-9923, General Report, was mailed to all such firms, requesting information on the nature of the firm's activities. From the information reported, the firm was given an industrial classification code and assigned to the appropriate economic census. Since construction firms found in this way were identified as such, only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

For 1982, some data will be published for Standard Consolidated Statistical Areas (SCSA's) and selected Standard Metropolitan Statistical Areas (SMSA's). Therefore, each establishment was assigned to an SMSA code or to the balance of a State. The balance of the State was considered to be a separate cell for the selection process. In States where none of the SMSA's had more than 500,000 inhabitants in the 1970 Decennial Census, all establishments were assigned to the balance of the State.

Selecting the employer sample - A construction universe of about 464,000 single establishment employer firms and 6,500 multiestablishment employers, accounting for another 13,000 construction establishments, was developed by the procedures described above. From this universe, a sample of 172,000 employer establishments was selected. This sample was generally organized by standard industrial classification (SIC) in State sequence. The sample was designed to provide publishable estimates for the most construction industries at the State and selected SMSA level. It consisted of all construction establishments in multiestabishment companies, all singleestablishment companies with the payroll equivalent of 20 employees or more, and a sample of single-establishment companies with less than 20 employees. There were three SIC's for which this standard plan was not used: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

The number of establishments classified in each of these three industries is very small and consequently, all single-unit establishments in these three industries were included in the sample. For sampling purposes, the number of employees was estimated from the 1981 payroll data in the administrative records, using an industry average wage per employee. The sampling was accomplished using a systematic method within each four-digit SIC. If the SIC code for an establishment was not complete, it was sampled as part of a two-digit group (e.g., 1520 was sampled as 1500, 1620 as part of 1600) except for non-classifiable cases in two-digit group 17. These were sampled as part of 1799 which is Special Trade Contractors, Not Elsewhere Classified. For the establishments with less than 20 employees, the sample was selected by sorting the establishments into State by SMSA by SIC by payroll sequences, and drawing a systematic sample of at least two establishments within each cell, with the probability of selection being proportional to the 1981 payroll. If the State-SMSA-SIC cell had two or less establishments in the frame, all establishments were selected (a 100-percent sample). A 100-percent sample was taken of the construction firms identified from the NC-9923, General Report, and of the transfers from other census trade areas. These latter cases were identified during the processing stages. These were caused either by changes of activity in the firm since the last updating of the classification file, or errors in the mailout classification. These cases were all added to the construction census, with certainty.

Estimation procedures for 1982 and 1977 data—Since all larger employer firms and some smaller ones were included in the census, sample estimation was required only for the universe of firms not selected with certainty. The published statistics are the totals of the estimates for the sampled firms and the

aggregates for the certainty (larger) firms. All estimates for 1982 and 1977 published here are simple unbiased estimates of the form:

$$n_{c}$$

$$x'_{c} = \sum x_{i}/p_{i}$$

$$i = 1$$

where: x'c is the simple unbiased estimate of a characteristic for a publication cell.

x i is the reported value of a characteristic for an individual establishment in the publication cell.

p; is the selection probability of that firm.

n c is the number of firms in the sample for the cell.

This method of estimation was used for all 1982 and 1977 characteristics. Before this formula was applied, it was necessary to convert into dollars those distributions of construction receipts which had been reported by the establishments as percentages—construction receipts by type of project, location of project, etc.

Reliability of employer statistics—Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimates directly from the sample reports, using methods appropriate for the sample design and form of estimation used.

The relative standard error is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Although relative standard errors have been calculated for all of the published statistics, they are shown for each statistic only in the tables presenting detailed statistics. The other tables show relative standard errors only for some characteristics because of lack of space.

Separate measures of reporting and processing errors are not available. However, estimates which were subject to large errors of these types are likely to have been detected and corrected, or withheld from publication in the process of the review of the data for reasonableness and consistency. Other specific qualifications of the published data are indicated in footnotes to the tables.

The statistics in this report were based on data received by the time of final publication. Data were imputed for establishments that did not report by that date. Selected establishments were contacted again to obtain as much information on the telephone as possible. Late data received in early 1984 were substituted for imputed data when the difference between the two was significant. Some publication cells in which more than 50 percent of the data were imputed have been suppressed.

#### Nonemployer Firms

General - As described earlier, the information derived from the business income tax returns of all firms was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched, were further classified on the basis of several characteristics. Returns with characteristics consistent with firms without payroll were treated as nonemployers. The nonemployer construction firms were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return. In 1982, this group accounted for 60 percent of the total number of construction establishments, but accounted for only 8 percent of all business receipts of all construction establishments.

Qualifications to the nonemployer data—Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

#### **CENSUS REPORT FORMS**

Information for the 1982 Census of Construction Industries was obtained from employer establishments primarily through the use of eight questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the three two-digit SIC groups (15, 16, and 17), and for the establishments classified in SIC 6552. Establishments with 50 or more employees all received the standard form. A sub-sample of establishments with fewer than 50 employees received short forms instead of the standard forms. The short forms covered only major items and omitted most of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were solicited from construction trade associations and appropriate advisory groups. The Census Bureau surveyed several thousand firms representing all economic activities to gain insight into the way companies maintain records and to see whether new information could be collected.

#### DATA PROCESSING

The 1982 census report forms were mailed out in December 1982. Collection of these report forms, also by mail, was essentially completed in July 1983. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, Ind., where routine editing and coding of the report forms were also accomplished.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters in Washington, D.C.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding) and imputation for missing items or for the small number of reports not received in time for tabulation. The imputation was performed on an industry (or industry group)-State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

#### GEOGRAPHIC CLASSIFICATION

Information for the 1982 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. Separate State codes were assigned based on this information.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected SCSA's and SMSA's.

#### **DUPLICATION IN RECEIPTS**

The aggregate of construction receipts reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census, contains varying amounts of duplication, since the construction work (and the receipts) of one firm may be subcontracted to other construction firms and also be included in the subcontractors' receipts. To avoid this duplication, a "net construction receipts" figure has been derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts.

Duplication in receipts between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added," avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added," is defined in the 1982 Census of Construction Industries as equal to all business receipts less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for SIC 6552 and SIC 1531 where land receipts are significant, value added is defined as equal to all business receipts less land receipts, payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels.

#### SPECIAL TABULATIONS

Special tabulations of data collected in the 1982 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies), as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Construction Statistics Division, Bureau of the Census, Washington, D.C., 20233.

To discuss a special tabulation before submitting specifications, call 301-763-5435.

### RELATIONSHIPS OF THE ECONOMIC CENSUSES TO CURRENT SURVEYS

The Census Bureau also conducts current surveys (monthly, quarterly, and annually) to keep abreast of the rapid changes in business conditions, new processes, new materials, and shifting demands of goods and services. The census universe provides the sampling frame, weights, and benchmarks on which some of these current surveys are based. The accuracy of the measures derived from these current surveys is directly related to the completeness of information provided in the censuses.

### COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1982 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity, whereas, the construction census figures cover both new construction and

maintenance and repair work, but only for establishments classified in the construction industry. Force account construction activity—construction work performed by the labor force of a nonconstruction company for itself, or by other entities (Federal, State, or local governments) for themselves, or by property owners for themselves—probably accounts for more than half of the difference in the data of the two series of reports. Other factors contributing to the difference are that the census data do not include: (1) the value of materials supplied by the owners of projects, (2) the value of separate architectural and engineering services and, to a lesser extent, (3) the value of construction work performed for others by firms outside the scope of construction (manufacturers who install, lumber yards and other businesses, etc.).

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics, and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology. Their effect is not fully known.

#### ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

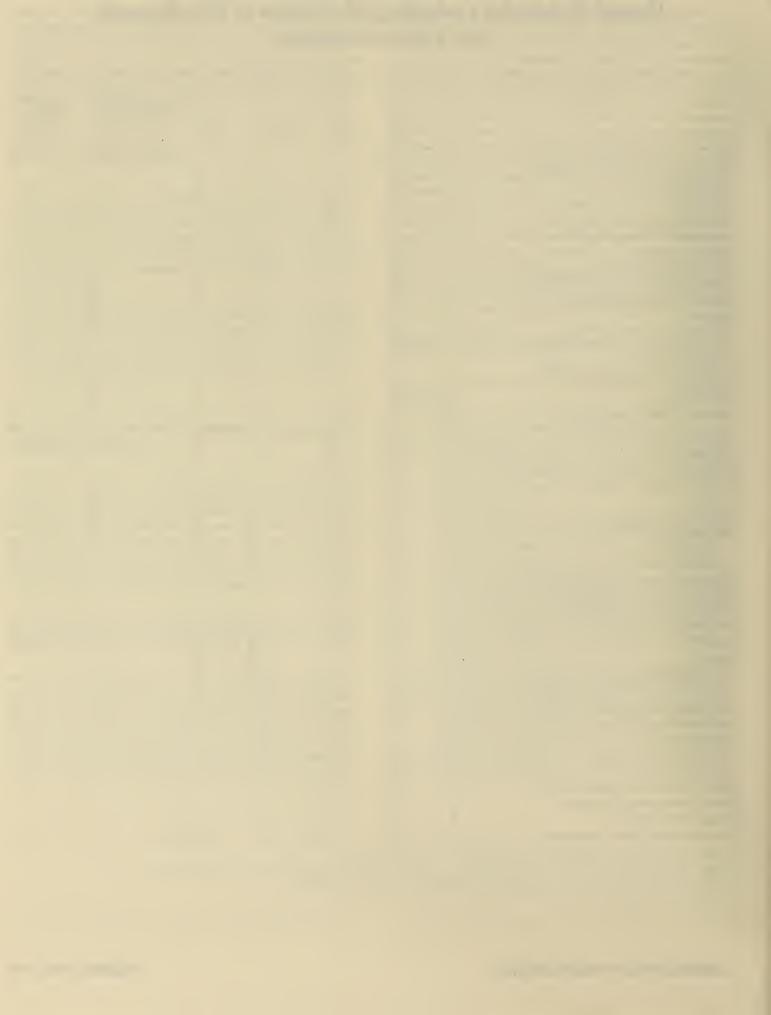
- \* Sampling error exceeds 40 percent.
- \*\* All employees (average) is the sum of construction workers during pay period including 12th of March, May, August, and November divided by 4, added to all others, March 12th.
- Represents zero.
- † Represents total construction receipts less payments for construction work subcontracted to others. (See Duplication in Receipts.)
- †† Represents all business receipts less payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels. In SIC's 1531 and 6552, land receipts are also subtracted from "all business receipts." (See Duplication in Receipts.)
- Possible duplication in data. (See Duplication in Receipts.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated standard error, or a consistency review.
- (W) Greater than zero but less than 1 percent.
- n.s.k. Not specified by kind.

### Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For U.S.	By State	By employ- ment size	By receipts size	By type, class, ownership, kind of business, and location of construction <sup>1</sup>	By specialization in types of construction
Assets and depreciation (gross book value):  Beginning of year—structures, machinery and equipment	3 1, 3 3	1	5	6		
structures, machinery and equipment	1, 3 3 3	1	5	6		
Communication services, payments for	2					
Employees: All employees—average number Construction workers—average number Other employees—March	1, 2 1, 2, 9 2	1	5	6		8
Employer costs for fringe benefits—legally required and voluntary expenditures	2					
Establishments:  Number in business at end of year  Number in business during the year	2 1, 2, 4, 9	1, 9	5	6		8
Hours—construction workers: Total		1, 9	5	6		
Inventories	4					
Materials, components, supplies, and fuels— payments for	1, 2	1	5	6		
Payroll: First quarter, all employees	1, 2 1, 2	1 1	5	6		8
Power, fuels, and lubricants—payments for			i			
Profile of the industry—selected industry averages	12					
Proprietors and working partners		13				
Receipts: All business receipts Construction receipts, total For work subcontracted in from others	2 1, 2, 4		5 5	6	11 2, 7, 10	8
Other business receipts and land receipts <sup>2</sup> Net construction receipts Value added	1, 2 1, 2	1	5 5			8 8
Rental payments:						
Total	2 2		5	6		
Repairs to structures and related facilities	1					
Repairs to machinery and equipment						
Storage capacity for fuels <sup>3</sup>	1	1				
Subcontract work to others, payments for	1, 2	1	5	6		8

Note: Data for 1977 and earlier years are also available in some of these tables.

<sup>&</sup>lt;sup>1</sup>Type—buildings, roads, etc. Class—new construction or maintenance and repair work. Ownership—private or government owned. <sup>2</sup>Other business receipts and land receipts are shown separately for SIC's 1531 and 6552 only. <sup>3</sup>Storage capacity for fuels shown only for SIC's 1611, 1622, 1623, and 1629.



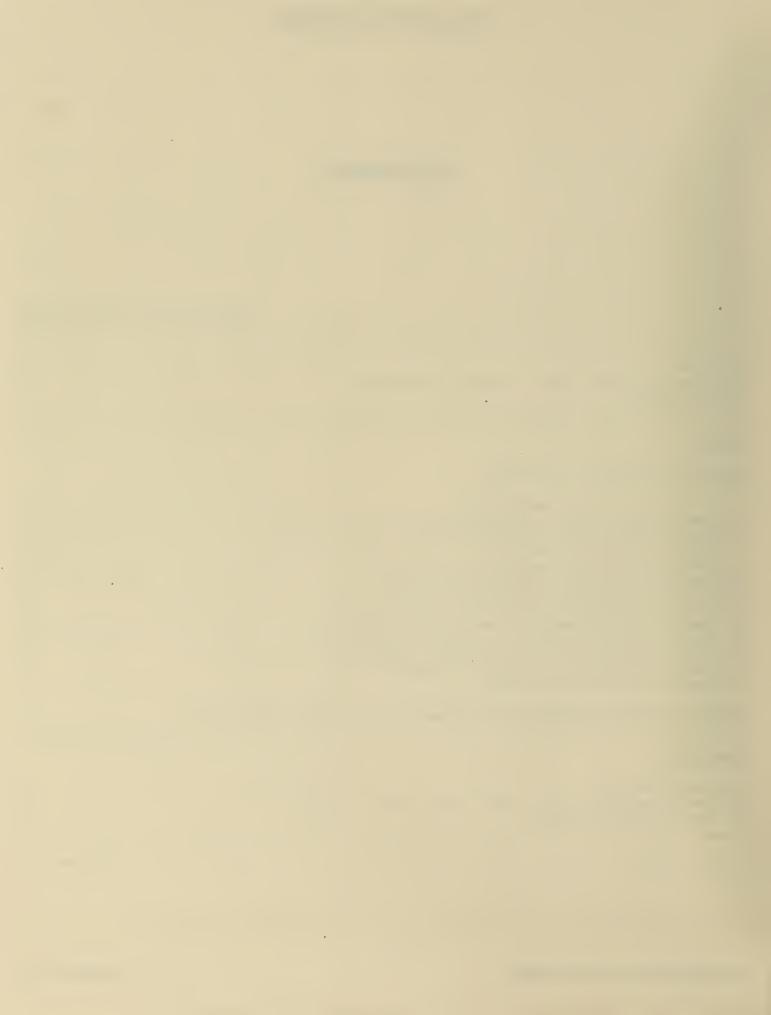
### **Operative Builders**

### CONTENTS

[Page numbers listed here omit the prefix that appears as part of the number of each page]

Page

User	oduction	III IX 3
TAI	BLES	
Stat	tistics for Establishments With Payroll	
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.	Detailed Statistics: 1982 and Earlier Census Years  Assets, Capital Expenditures, and Depreciation: 1982 and Earlier Census Years  Value of Inventories: 1982 and 1981  Selected Statistics by Employment Size Class: 1982 and 1977  Selected Statistics by Receipts Size Class: 1982 and 1977  Construction Receipts by Type of Construction: 1982 and 1977  Selected Statistics by Specialization in Types of Construction: 1982  Quarterly Construction Worker Hours and Employment by State: 1982  Construction Receipts by Location of Construction Work: 1982 and 1977  All Business Receipts by Kind of Business Activity: 1982 and 1977  Profile of Establishments in This Industry: 1982 and Earlier Census Years	4 6 7 8 9 10 11 12 14 15 15
API	PENDIXES	
A. B. C.	Explanation of Terms	B-1
Publ	lication Program Inside back o	over



#### **SUMMARY OF FINDINGS**

Establishments classified in this industry are primarily engaged in the construction of single-family houses, and other buildings for sale on their own account rather than as contractors. This industry includes speculative builders and condominium developers. For specific examples, refer to the 1972 Standard Industrial Classification (SIC) Manual and its 1977 supplement.1

During 1982, there were 14,053 establishments with payroll classified in this industry.2 All business receipts of these establishments amounted to \$18.1 billion, of which \$15.6 billion were receipts for construction work. Their payments for construction work subcontracted to others amounted to \$6.8 billion, leaving net construction receipts of about \$8.9 billion. Value added for 1982 was \$5.5 billion. (See Introduction and appendixes for explanation of terms.)

The establishments in this industry made payments of \$3.6 billion for materials, components, and supplies purchased for use in construction work for others, purchased and subsequently provided to subcontractors for their use, purchased and then resold to others, and purchased and used in construction work for their own account. However, materials furnished to contractors by owners of projects are, of course, not included. Payments of \$162 million were also made for selected power, fuels, and lubricants purchased during the year from other companies or received from other establishments of the parent company.

Establishments with 10 employees or more, while representing only 16 percent of the total number of employer establishments in this industry, accounted for 73 percent of all business receipts.

Total average employment in the industry showed a decrease of 38 percent from 1977 to a total of 108 thousand employees. Total payroll for 1982 amounted to \$1.9 billion. Hours worked by construction workers during the first quarter of 1982 were 19.9 million hours, while hours worked during the third quarter were 21.8 million hours.

Payments of \$333 million for employer costs for fringe benefits (not included in payroll) represent expenditures during the year for legally required and voluntary fringe benefit programs for employees-such as employers' Social Security contributions, unemployment compensation, pension plans, and welfare plans.

The 1982 estimates for establishments with payroll in all of the construction industries are based on a probability sample consisting of about 172,000 construction establishments. The estimates for this particular industry are based on a sample of about 6,000 establishments.

The statistics reported by each establishment cover all of its activities, not just construction. Therefore, aggregates of such data for an industry reflect not only the primary construction activities of the establishments in the industry, but also their secondary construction activities and any nonconstruction activities.

All data shown are based on current dollars for the years specified and have not been adjusted for price changes or inflation between 1977 and 1982.

<sup>&#</sup>x27;Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

<sup>&</sup>lt;sup>2</sup>Limited data for establishments in this industry without payroll (nonemployers) will be included in the U.S. industry summary report to be published after the individual industry reports have been issued.

#### Table 1. General Statistics for Establishments With Payroll by State: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

	1982												
		Emplo	yees**	Pay	yroli								
Location of establishment	Number of establishments	All	Construction workers	All employees	Construction workers	Construction worker hours (thousands)	Total construction receipts	Net construction receipts†					
United States	14 053	107 635	53 212	1 873 775	709 719	83 600	15 607 430	8 920 186					
Alabama Alaska Arizona Arkansas California	237	1 445	827	18 349	8 649	1 425	126 446	73 536					
	105	458	347	9 205	6 965	608	73 341	45 956					
	267	3 347	1 284	65 721	19 341	1 993	638 553	316 437					
	98	514	305	7 001	2 845	557	52 587	36 672					
	1 396	14 504	5 133	336 111	86 916	6 855	2 586 798	1 234 652					
Colorado	413	3 391	1 700	72 277	26 784	2 567	789 050	464 360					
	257	1 440	965	22 118	12 707	1 720	124 256	80 729					
	39	385	297	7 068	5 243	465	39 080	21 966					
	28	480	256	10 524	3 931	373	50 716	20 407					
	1 320	14 106	5 8 <b>7</b> 3	223 740	74 807	9 690	2 004 320	1 085 758					
Georgia	511	3 336	1 876	43 102	19 476	2 782	376 455	235 932					
	19	(S)	(S)	(S)	(S)	(S)	(S)	(S)					
	42	219	94	2 430	*927	147	17 009	11 024					
	316	2 086	955	41 963	14 829	1 433	293 399	162 402					
	256	1 246	740	19 324	10 043	1 233	151 638	84 510					
lowa	95	456	236	7 663	3 035	314	51 483	36 244					
	190	868	536	11 189	5 398	860	104 176	57 066					
	155	776	412	10 384	4 719	569	100 006	55 944					
	264	1 692	971	25 833	11 775	1 428	156 685	108 084					
	47	287	132	3 397	1 622	228	22 192	10 745					
Maryland	265	3 479	1 785	73 495	28 101	3 008	702 205	358 389					
	286	1 327	765	18 831	9 588	1 189	131 543	78 988					
	245	785	390	13 863	5 151	533	95 527	57 630					
	263	1 923	1 150	35 180	16 511	1 701	254 390	139 610					
	77	426	264	4 748	2 601	426	35 470	25 609					
Missouri Montana Nebraska Nevada New Hampshire	232	1 910	1 186	34 410	17 200	1 544	207 486	116 727					
	50	210	151	2 618	1 524	250	16 164	11 090					
	116	489	287	7 818	3 610	467	61 254	34 011					
	52	529	281	12 108	5 065	502	100 940	36 710					
	84	424	270	7 547	4 301	523	46 344	25 682					
New Jersey New Mexico New York North Carolina North Dakota	511	2 729	1 317	47 818	17 536	2 024	405 729	235 894					
	183	1 106	683	14 165	7 125	937	88 020	55 267					
	537	3 582	1 645	58 104	21 199	2 829	412 211	227 235					
	438	2 904	1 506	38 305	16 544	2 623	325 634	215 030					
	24	207	112	2 628	1 426	181	21 157	18 200					
OhioOklahomaOregonPennsylvania	385	2 091	1 233	34 974	18 367	1 877	294 077	163 950					
	303	1 551	907	24 436	11 156	1 523	184 604	119 676					
	211	909	478	15 921	6 589	691	106 293	73 732					
	334	2 820	1 693	38 614	20 516	2 798	251 332	159 163					
	51	495	346	5 740	2 804	545	28 158	15 514					
South Carolina South Dakota Tennessee Texas Utah	166	1 318	678	19 687	6 868	1 087	111 523	62 632					
	12	(S)	(S)	(S)	(S)	(S)	(S)	(S)					
	310	1 954	1 248	25 328	13 539	1 918	159 723	103 639					
	1 560	14 649	6 875	260 676	91 557	11 461	2 678 070	1 738 032					
	125	819	532	11 857	6 000	662	77 620	41 701					
Vermont	51	207	147	2 410	1 656	278	18 617	13 914					
	474	3 806	2 089	59 565	26 068	3 404	552 744	308 183					
	390	2 353	1 385	40 301	15 450	2 052	309 814	207 852					
	96	372	270	4 025	3 046	441	20 473	15 871					
	102	542	270	8 782	3 514	414	61 989	39 872					
	54	305	190	5 516	3 021	228	47 171	30 686					

					1977				-Con.	1982-		
Location of establish ment	lative standard for of estimate (percent) for column—		error (pe	Value added††	Total construction receipts	All employees**	End-of-year gross book value of depreciable assets	Capital expenditures, other than land	Rental payments for machinery, equipment, and structures	Payments for construction work sub- contracted to others	Payments for materials, components, supplies, and fuels	Value added††
	М	Н	В	Q	Р	0	N	М	L	К	J	ı
U.	(W)	(W)	(W)	5 229 031	19 812 272	173 819	3 204 704	252 825	95 850	6 766 3 <b>7</b> 3	3 776 102	5 492 462
Ala.	18	9	10	120 853	333 477	3 663	19 019	1 635	539	52 910	44 606	29 989
Alaska	16	11	10	8 163	40 021	398	19 770	1 522	393	27 385	34 224	12 488
Ariz.	3	1	3	153 251	555 782	4 653	124 473	6 010	5 200	329 588	76 565	249 110
Ark.	9	10	10	38 275	136 757	1 642	19 018	767	184	15 915	14 269	24 140
Calif.	(W)	1	1	1 243 813	4 344 629	23 148	551 498	50 846	21 085	1 362 051	289 864	1 077 662
Colo.	4	2	6	166 200	635 166	4 151	92 496	6 473	5 054	328 792	194 144	270 597
Conn.	9	8	7	95 840	283 399	2 005	49 262	1 158	505	45 819	40 974	39 033
Del.	20	16	14	11 509	37 981	396	26 661	557	207	17 114	8 956	13 332
D.C.	3	18	13	24 049	74 002	1 574	27 639	1 113	(D)	30 309	(D)	12 079
Fia.	(W)	1	1	330 528	1 304 402	15 837	435 730	48 933	11 229	921 477	422 285	736 875
Ga. Hawaii Idaho III. Ind.	7 - 40 4 1	5 33 4 8	6 - 34 5 8	63 131 62 310 14 577 210 643 (D)	329 460 136 045 69 843 953 320 304 532	3 603 1 134 852 5 895 3 775	59 850 (S) 2 829 65 195 37 235	3 040 (S) 68 1 932 7 675	1 176 (S) 41 1 833 650	141 195 (S) 5 985 131 013 47 128	130 691 (D) 5 119 73 863 52 534	111 915 (D) 5 989 91 522 32 954
lowa	6	14	14	32 004	128 214	1 746	16 342	910	205	16 781	16 277	19 359
Kans.	12	13	13	32 408	135 327	1 540	35 960	1 497	372	47 110	36 168	21 650
Ky.	10	9	11	43 876	164 477	1 826	20 444	525	260	44 062	23 219	36 977
La.	8	7	8	67 512	238 139	3 069	30 606	1 966	766	49 963	58 807	51 806
Maine	14	22	19	10 242	38 271	530	6 341	317	29	*11 474	6 176	5 946
Md.	(W)	2	3	144 983	609 329	5 090	127 655	16 757	7 543	345 272	125 817	244 620
Mass.	18	9	8	53 840	155 844	1 824	61 894	2 703	323	52 648	35 784	47 389
Mich.	13	9	9	73 936	355 894	2 566	22 314	1 164	558	38 667	26 493	32 072
Minn.	10	5	6	84 718	304 526	2 869	45 910	2 428	1 746	116 338	65 535	74 049
Miss.	37	22	15	19 937	99 588	1 059	11 547	391	192	9 861	14 298	11 560
Mo.	10	6	5	68 421	269 895	3 541	45 548	3 702	897	90 759	50 543	71 314
Mont.	46	22	25	21 266	67 104	613	3 458	*660	81	5 074	3 466	9 225
Nebr.	11	16	13	31 711	128 495	1 203	17 283	1 058	356	27 243	21 328	13 095
Nev.	4	5	7	26 347	131 532	896	8 836	559	1 406	65 448	(D)	25 131
N.H.	11	12	13	22 101	90 371	804	10 257	396	242	20 662	16 098	11 646
N.J.	3	4	5	152 592	454 729	3 937	93 307	11 530	827	169 835	100 509	141 690
N. Mex.	22	10	10	33 070	120 949	2 029	12 296	1 223	533	32 866	22 691	34 625
N.Y.	4	4	5	125 077	493 254	4 320	130 605	4 070	1 568	185 068	110 064	125 547
N.C.	18	4	5	107 853	365 533	4 260	48 509	6 495	941	110 606	152 990	68 685
N. Dak.	33	14	24	33 486	78 223	1 317	3 150	450	168	2 957	6 477	12 152
Ohio Okla. Oreg. Pa. R.I.	7 12 23 11 10	5 7 9 5	6 9 8 7 11	198 463 32 295 62 643 141 934 (D)	786 959 142 681 245 399 492 977 38 308	6 656 1 690 2 608 5 251 533	83 938 40 393 45 894 68 899 7 353	2 213 2 958 1 611 2 700 71	1 379 716 953 1 012 47	130 656 65 449 32 561 92 395 12 644	87 976 64 864 25 686 74 144 9 216	81 788 55 762 54 926 89 176 *6 777
S.C. S. Dak. Tenn. Tex. Utah	3 14 3 8	11 - 8 1 13	13 - 8 2 10	31 362 7 442 78 156 430 446 30 984	140 515 28 813 284 733 1 860 704 180 335	1 844 535 3 534 15 195 1 889	82 194 (S) 44 250 266 393 30 530	3 632 (S) 1 765 26 162 9 684	1 143 (D) 825 14 159 895	48 891 (S) 56 083 980 243 37 071	29 958 (S) 54 875 817 720 22 251	44 818 (D) 55 619 906 951 25 837
Vt.	28	30	28	3 482	12 845	262	6 048	132	68	4 703	8 615	6 951
Va.	7	3	4	220 006	764 607	7 471	119 933	2 532	3 837	244 666	156 005	158 010
Wash.	11	3	4	151 560	560 734	4 595	37 321	3 346	2 324	102 730	70 560	144 659
W. Va.	24	16	17	17 601	77 471	1 604	5 848	160	81	4 602	8 758	8 248
Wis.	1	12	11	46 405	186 091	1 976	33 544	4 249	331	22 132	17 442	23 416
Wyo.	28	14	15	11 999	40 593	415	10 235	613	228	16 485	13 032	17 999

#### Table 2. Detailed Statistics for Establishments With Payroll: 1982 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item					Relati	ive stan	dard er	ror of
	1982	1977	1972	1967	1982	1977	1972	1967
Number of establishments in business during year	14 053	23 477	(S)	13 237	1	2	-	3
Number of establishments in business at end of year	13 624	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Proprietors and working partners	2 481	10 397	(S)	5 700	4	3	_	4
All employees**	107 635	173 819	(S)	72 305	1	2	_	2
Construction workers:								
March Mary May May May May May May May May May Ma	50 316 52 952 53 911	95 642 112 707 119 205	(S) (S) (S) (S) (S)	42 392 47 981 54 312	1	1	-	2 3 2 2 2
August November Average	51 237 53 212	110 876 109 702		48 416 48 945	1	1	-	2 2
Other employees:								
March	51 721	59 416	(S)	22 545	1	4	-	2
Construction worker hours (thousands): January to March	19 913	(NA) (NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
luly to Sentember	21 204 21 778 20 703	(NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA)	1 1	(XA) (XA) (XA) (XA) (XA) (XA) (XA) (XA)	(NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA)
October to December	20 703 83 600	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Payroll, all employees	1 873 775 709 719	2 026 118 1 053 389	(S) (S) (S)	465 235 275 517	1	2 1 2	-	2 2 2
Payroll, other employees	1 164 056	1 053 389 972 729	(S)	275 517 190 146	1	2	-	2
First quarter payroll, all employees	437 994	413 934	(NA)	(NA)	1	2	(NA)	(NA)
Employer costs for fringe benefits  Legally required expenditures  Voluntary expenditures	332 603 238 386 94 217	321 075 206 937 114 138	(NA) (NA) (NA)	(NA) (NA) (NA)	1 1 1	2 2 2	(NA) (NA) (NA)	(NA) (NA) (NA)
All business receipts	18 084 627 15 607 430	22 917 960 19 812 272	(S)	4 769 190 4 174 325	1	1	-	2
Total construction receipts  Receipts for work subcontracted in from others  Land receipts'  Other business receipts	90 971 2 049 688	130 570	(S) (S) (S) (S)	32 579 480 555	6	1 6 1 3	_	13 13 3
	427 508	473 446	(S)	116 391	1	3	-	3
Net construction receipts†	8 920 186	10 627 381	(S)	2 219 617	1	2	-	2
Value added††	5 492 462	5 229 031	(S)	1 210 881	1	3	-	3
Selected payments  Materials, components, and supplies <sup>2</sup> Construction work subcontracted to others	10 542 476 3 613 878	15 056 687 5 639 757	(S) (S)	3 078 160 1 124 030	1	1	-	2 2 3
Ociociou power, ruero, and rubricarits	6 766 373 162 224	9 184 892 232 038	(S) (S) (S) (NA) (NA)	1 954 859 (NA)	1	2	(NA)	(NA)
Electricity	70 476 15 177 67 162	65 487 23 100 98 623	l (NA)	(NA) (NA) (NA)	4	223323	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA)
Gasoline and diesel fuel (including gasohol) Other, including lubricating oils and greases	9 407	44 834	(NA) (NA)	(NA)	3	3	(NA)	(NA)
Storage capacity for fuels <sup>3</sup> (thousand gallons)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Rental payments for machinery, equipment, and structures  For machinery and equipment  For structures	95 850 34 702 61 148	64 054 37 615 26 439	(NA) (S) (NA)	(NA) 8 943 (NA)	1 2 1	3 3 4	(NA) (NA)	(NA) 7 (NA)
Selected purchased services	126 221	161 959	(NA)	(NA)	1	2	(NA)	(NA)
Communication services————————————————————————————————————	58 195 27 337 40 689	. 68 985 23 079 69 896	(NA) (NA) (NA)	(NA) (NA) (NA)	1 2 2	2 2 5 3	(NA) (NA) (NA)	(NA) (NA) (NA)
Ownership of construction projects: Total construction receipts	15 607 430	19 812 272	(S)	4 174 325	1	1	_	2
Government ownedPrivately owned	205 309 15 402 121	114 825 19 697 448	(S) (S) (S)	(NA) (NA)	31 1	8	-	(NA) (NA)

¹Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

²For 1967 and 1972, includes data for power, fuels, and lubricants.
³Data were collected only for establishments classified as heavy construction contractors.

#### Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1982 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item						ive star stimate		
	1982	1977	1972	1967	1982	1977	1972	1967
STRUCTURES, MACHINERY, AND EQUIPMENT								
Beginning-of-year gross book value of depreciable assets Capital expenditures, other than land New Used Retirements and disposition of depreciable assets	3 322 475 252 825 221 250 31 575 370 596	(NA) 696 279 637 935 58 344 (NA)	(NA) (S) (S) (S) (NA)	(NA) 76 378 56 572 19 806 (NA)	1 1 5 3	(NA) 5 4 5 (NA)	(NA) - - (NA)	(NA) 4 6 3 (NA)
End-of-year gross book value of depreciable assets	3 204 704	2 713 842	(S)	(NA)	1	4	-	(NA)
Depreciation charges during year	280 161	179 476	(S)	(NA)	1	3	-	(NA)
Structures, Additions, and Related Facilities								
Beginning-of-year gross book value of depreciable assets Capital expenditures, other than land New structures and related facilities Used structures and related facilities Retirements and disposition of depreciable assets	1 566 251 153 362 140 718 12 644 275 395	(NA) 508 568 479 554 29 014 (NA)	(NA) (S) (S) (S) (NA)	(NA) 55 496 38 796 16 700 (NA)	2 2 1 11 4	(NA) 6 5 8 (NA)	(NA) - - (NA)	(NA) 5 8 3 (NA)
End-of-year gross book value of depreciable assets	1 444 218	1 949 861	(S)	(NA)	1	2	-	(NA)
Depreciation charges during year	127 949	82 723	(S)	(NA)	2	4	-	(NA)
Machinery and Equipment								
Beginning-of-year gross book value of depreciable assets  Capital expenditures, other than land  New machinery and equipment, including automobiles and trucks  New automobiles and trucks, intended primarily for highway use  Used machinery and equipment, including automobiles and trucks  Retirements and disposition of depreciable assets	99 463 80 531	(NA) 187 712 158 381 81 731 29 331 (NA)	(NA) (S) (S) (NA) (S) (NA)	(NA) 20 882 17 776 (NA) 3 106 (NA)	2 2 2 4 4 3	(NA) 5 4 3 6 (NA)	(NA) (NA) (NA)	(NA) 6 1 (NA) 11 (NA)
End-of-year gross book value of depreciable assets	1 760 486	763 981	(S)	(NA)	2	2	-	(NA)
Depreciation charges during year	152 211	96 754	(S)	(NA)	1	2	-	(NA)

#### Table 4. Value of Inventories for Establishments With Payroll: 1982 and 1981

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

ltem	Establishments with payroll	Relative standard error of estimate (percent)
All establishments: Number Total construction receipts	14 053 15 607 430	1
Establishments with inventories:  Number	5 349 7 989 909 1 990 552 88 243 19 433 1 902 309	3 1 2 10 23 2
End of 1981, total  Value for establishments with LIFO reserve  Amount of LIFO reserve  Value for establishments with no LIFO reserve	1 174 195 46 050 12 188 1 128 145	2 12 16 2
Establishments with no inventories:  Number  Total construction receipts	8 704 7 617 521	1

<sup>&</sup>lt;sup>1</sup>Inventories at cost or market prior to any adjustment to correct to LIFO values.

## Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

	Establishments with an average of—											
Selected statistics	Total	1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more		
1982												
Number of establishments All employees** Payroll, all employees Construction worker hours (thousands) All business receipts Total construction receipts Net construction receipts†	14 053 107 635 1 873 775 83 600 18 084 627 15 607 430 8 920 186	9 064 18 067 254 657 13 360 2 542 680 2 209 530 1 263 211	2 709 17 527 271 681 15 299 2 338 284 2 036 346 1 251 667	1 284 17 194 294 986 14 919 2 561 128 2 209 770 1 245 633	737 21 720 414 896 17 358 4 148 300 3 577 172 1 900 183		74 11 678 218 033 7 155 3 817 026 1 925 975 1 113 748	18 10 155 180 351 6 730 (D) 1 341 767 855 268	° € € € € € €	2 (D) (D) (D) (D) (D)		
Value added†† Payments for materials, components, supplies, and fuels Payments for construction work subcontracted to others Rental payments for machinery, equipment, and structures Capital expenditures, other than land End-of-year gross book value of depreciable assets	5 492 462 3 776 102 6 766 373 95 850 252 825 3 204 704	576 895 713 457 947 324 8 449 24 648 646 661	647 533 639 905 787 888 11 330 26 564 501 866	700 619 577 395 969 658 13 003 25 806 417 801	1 127 895 836 545 1 703 471 21 751 68 795 641 529	988 444 393 663 1 030 613 15 714 46 905 325 279	843 023 615 135 826 037 13 790 27 044 298 145	608 051 (D) 501 381 11 812 33 061 373 421	000000	(D) (D) (D) (D) (D)		
All employees** Total construction receipts Value added††	173 819 19 812 272 5 229 031	31 915 4 054 992 926 598	30 490 3 067 290 772 882	29 024 3 010 370 778 754	26 771 3 508 515 945 225	16 781 2 259 061 664 971	14 330 1 609 179 530 513	14 301 1 621 445 *278 906	1 656 312 023 101 818	8 551 369 399 229 365		
1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)  All employees** Net construction receipts†	1 1	2 3 7	3 3 10	3 2 4	3 1 1	(W) (W) (W)	(W) (W) (W)	(W) (W) (W)	-	=		

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

#### Table 6. Selected Statistics for Establishments With Payroll by Receipts Size Class: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

			Establishments with all business receipts of—										
Selected statistics	Total	Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	to	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more		
Number of establishments All employees** Payroll, all employees Construction worker hours (thousands) All business receipts Total construction receipts Net construction receipts  Value added†† Payments for materials, components, supplies, and fuels Payments for construction work subcontracted to others Rental payments for machinery, equipment, and structures Capital expenditures, other than land End-of-year gross book value of depreciable assets	14 053 107 635 1 873 775 83 600 18 084 627 15 607 430 8 920 186 5 492 462 3 776 102 6 766 373 95 850 252 825 3 204 704	868 998 2 579 494 11 966 10 440 5 632 *2 429 3 404 4 812 *31 117 8 544	913 1 237 6 558 903 32 039 27 996 17 722 8 569 9 733 10 325 146 331 17 584	1 707 3 247 25 616 2 448 126 336 109 970 70 502 31 702 41 072 39 569 1 320 60 700	2 891 7 638 81 357 5 691 482 343 420 611 267 110 120 168 153 885 153 892 2 141 13 157 189 408	2 542 11 239 137 613 9 629 907 313 787 480 498 936 238 559 275 647 289 143 4 402 12 754 264 018	2 321 14 428 219 236 12 671 1 626 933 1 420 460 851 875 404 379 472 155 568 897 7 322 17 561 381 934	1 655 17 404 308 742 15 004 2 534 476 2 209 627 1 326 859 648 783 712 680 888 292 9 574 31 383 643 485	550 11 793 224 071 10 421 1 950 463 1 699 370 985 795 578 828 442 787 715 895 10 003 19 988 263 403	294 9 338 202 270 7 202 2 010 317 1 754 603 919 632 534 612 413 484 839 240 11 816 36 430 284 475	310 30 311 665 733 19 134 8 402 439 7 166 872 3 976 121 2 924 430 1 251 252 3 256 305 49 898 119 780		
1977  All employees** Total construction receipts Value addedft  1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)  All employees** Net construction receipts Capital expenditures, other than land	173 819 19 812 272 5 229 031	1 611 14 159 2 398 5 25 38	2 156 43 633 10 216 6 6 6 25	5 794 183 606 50 582 50 582	16 567 842 339 227 307	20 418 1 471 190 380 867 4 3 11	24 569 2 408 157 571 259 4 4 4 4 8	30 237 3 758 783 978 572 3 3 3 3	15 577 2 081 382 511 370	156 890 19 009 026 12 496 462 (W) (W) (W)	(NA) (NA) (NA)		

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Data for this size class include establishments with receipts of \$10,000,000 or more, which were not tabulated separately in 1977.

## Table 7. Construction Receipts for Establishments With Payroll by Type of Construction: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

		Construct	tion receipts					
		New co	nstruction			mate (p	dard er ercent)	
Type of construction	Total	Total	Additions and alterations <sup>1</sup>	Maintenance and repair		colui	mn—	
	A	В	С	D	A	В	С	D
1982								
Total construction receipts‡	15 607 430	15 412 271	439 018	195 159	1	1	2	3
Building construction Single-family houses, detached Single-family houses, attached Apartment buildings with two or more apartments Other residential buildings Office and bank buildings Office buildings Office buildings Bank buildings and other financial institutions Industrial buildings and warehouses Industrial buildings. Warehouses Stores, restaurants, public garages, and automobile service stations Other nonresidential buildings  Nonbullding construction  Construction work, n.s.k.	13 488 163 10 129 865 3 358 298 1 167 720 135 980 305 477 291 545 13 931 213 487 163 470 50 016 164 072 75 865	15 364 318 13 358 495 10 032 416 3 326 078 1 132 232 133 751 298 247 284 575 13 671 209 130 161 421 47 708 159 286 73 177 28 446	438 150 257 696 204 872 52 824 93 571 4 329 28 392 24 302 4 089 11 752 7 843 3 909 17 304 25 106	186 445 129 667 97 448 32 219 35 488 2 228 7 230 6 970 259 4 357 2 049 2 307 4 785 2 690 6 388 2 325	1 1 1 1 1 1 3 2 2 7 4 4 4 6 9	1 1 1 1 1 1 2 3 2 2 2 7 7 4 4 6 8 8	2 2 3 3 5 2 18 8 8 23 17 22 21 10 27 6 47	3 2 3 4 13 32 6 6 24 32 22 61 36 18
1977								
Total construction receipts‡	19 812 272	19 550 893	(NA)	261 379	1	1	(NA)	4
Building construction Single-family houses. Apartment buildings with two or more apartments Other residential buildings. Office and bank buildings Industrial buildings and warehouses Stores, restaurants, public garages, and automobile service stations Other nonresidential buildings	17 657 301 1 395 291 42 051 145 509	19 412 851 17 489 188 1 333 365 39 803 139 126 224 379 127 467 59 523	(NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	258 471 168 113 61 926 2 248 6 383 9 724 6 958 3 121	1 1 2 4 6 4 7 12	1 1 2 4 5 4 7 13	(NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	4 5 10 40 20 15 37 15
Nonbuilding construction	89 340	8 <b>7 0</b> 62	(NA)	2 278	7	7	(NA)	20
Construction work, n.s.k.	51 627	50 827	(NA)	800	20	20	(NA)	28

<sup>1</sup>For 1977, separate data were not collected. These data are included with "New Construction."

#### Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1982

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or total receipts for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of construction receipts by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

				Total constru	ction receipts			Payments for		elativ	
ltem	Number of establishments	All employees**	Payroli, ali employees	For all types	For specialized type	Net construction receipts†	Value added††	construction work sub- contracted to others	of o	estima cent)	ate for
	А	В	С	D	E	F	G	н	В	D	н
All establishments	14 053	107 635	1 873 775	15 607 430	13 208 695	8 920 186	5 492 462	6 766 373	1	1	1
Establishments not specializing by typeEstablishments specializing 51 percent or more	517 13 535	8 369 99 266	147 522 1 726 253	947 570 14 659 860	13 208 695	592 839 8 327 347	393 865 5 098 597	356 608 6 409 765	3	2	2
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type	10 723	66 168	1 161 105	10 345 004	9 470 337	6 048 331	3 638 962	4 354 410	1	1	1
Establishments with—  100 percent specialization	9 103 532 411 329 257 91	45 534 5 477 4 959 3 788 4 950 1 459	759 901 106 439 93 968 67 200 104 004 29 591	6 443 777 1 157 939 932 247 528 189 951 867 330 984	6 443 777 1 086 304 771 842 388 841 596 899 182 671	3 994 876 581 759 540 359 315 310 445 177 170 849	2 336 261 290 328 363 471 198 056 352 075 98 768	2 488 333 583 494 393 910 218 581 508 383 161 708	2 4 3 5 3	1 2 2 3 1 2	1 2 2 4 1
SINGLE-FAMILY HOUSES, ATTACHED	1 848	<b>20 25</b> 3	356 528	2 748 434	2 347 841	1 445 693	881 281	1 312 162	2	1	
All establishments specializing in type	1 040	20 253	350 526	2 740 434	2 347 041	1 445 693	881 281	1 312 162	2	1	1
Establishments with—  100 percent specialization	1 310 126 102 137 115 57	9 309 3 297 2 053 2 424 1 915 1 254	155 939 58 059 39 089 41 805 35 775 25 860	1 133 536 405 591 215 392 350 519 372 849 270 546	1 133 536 388 303 182 467 259 583 235 337 148 612	605 630 256 746 38 885 221 098 201 725 121 609	351 002 166 820 7 600 160 212 128 151 67 494	532 255 148 845 178 293 132 707 171 124 148 937	3 3 7 4 5 7	2 3 5 3 1	3 4 4 2 4 1
APARTMENT BUILDINGS WITH TWO OR MORE APARTMENTS											
All establishments specializing in type	560	8 671	130 408	1 000 124	877 513	540 771	353 <b>37</b> 1	468 214	3	2	2
Establishments with— 100 percent specialization	393 29 42 38 37 21	4 081 403 1 537 1 803 429 418	55 320 9 337 27 069 28 440 4 496 5 746	416 035 107 351 209 269 188 393 30 973 48 103	416 035 99 879 175 449 139 640 19 663 26 844	222 097 62 608 100 935 104 349 21 991 28 791	152 346 42 214 52 430 76 157 12 683 17 540	196 860 48 086 108 334 84 998 8 982 20 954	5 6 2 2 22 13	3 3 2 2 14 11	3 4 (W) 4 22 8

#### Table 9. Quarterly Construction Worker Hours and Employment for Establishments With

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

		Average		January t	o March	April to June			
Location of establishment	Number of establishments	number of construction workers	Construction worker hours (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)		
	Α	В	С	D	E	F	G		
United States	14 053	53 <b>212</b>	83 600	50 3 <b>16</b>	19 913	52 952	21 204		
Alabama Alaska Arizona Arkansas California	237	827	1 425	733	325	816	364		
	105	347	608	217	97	381	168		
	267	1 284	1 993	1 390	520	1 268	515		
	98	305	557	219	103	256	118		
	1 396	5 133	6 855	4 963	1 737	5 039	1 761		
Colorado	413	1 700	2 567	1 691	632	1 623	661		
	257	965	1 720	927	412	948	455		
	39	297	465	229	90	306	112		
	28	256	373	208	76	282	98		
	1 320	5 873	9 690	5 942	2 455	5 916	2 458		
Georgia Hawaii Idaho Illinois Indiana	511	1 876	2 782	1 777	664	1 840	715		
	19	(S)	(S)	(S)	(S)	(S)	(S)		
	42	94	147	86	*31	*65	*29		
	316	955	1 433	749	295	1 019	368		
	256	740	1 233	631	270	731	313		
lowaKansasKentuckyLouisianaMaine	95	236	314	231	72	234	80		
	190	536	860	698	284	509	209		
	155	412	569	433	146	446	153		
	264	971	1 428	925	357	924	337		
	47	132	228	87	39	137	53		
Maryland	265	1 785	3 008	1 597	663	1 768	749		
Massachusetts	286	765	1 189	614	243	732	289		
Michigan	245	390	533	388	138	403	145		
Minnesota	263	1 150	1 701	983	394	1 138	420		
Mississippi	77	264	426	294	115	282	106		
Missouri	232	1 186	1 544	1 012	304	1 192	411		
	50	151	250	88	31	94	41		
	116	287	467	273	119	293	119		
	52	281	502	245	105	286	129		
	84	270	523	237	108	287	134		
New Jersey	511	1 317	2 024	1 229	463	1 315	513		
	183	683	937	675	239	699	236		
	537	1 645	2 829	1 514	674	1 637	728		
	438	1 506	2 623	1 436	616	1 623	724		
	24	112	181	97	37	111	48		
OhioOklahomaOklahomaOregonPennsylvaniaRhode Island	385	1 233	1 877	1 105	418	1 270	494		
	303	907	1 523	831	348	976	389		
	211	478	691	482	182	495	178		
	334	1 693	2 798	1 470	577	1 737	747		
	51	346	545	304	118	338	136		
South Carolina South Dakota Tennessee Texas Utah	166	678	1 087	570	250	610	264		
	12	(S)	(S)	(S)	(S)	(S)	(S)		
	310	1 248	1 918	1 157	455	1 226	495		
	1 560	6 875	11 461	6 871	2 867	6 814	2 828		
	125	532	662	437	136	520	152		
Vermont	51	147	278	89	*43	152	65		
	474	2 089	3 404	2 028	836	1 951	817		
	390	1 385	2 052	1 363	512	1 418	537		
	96	270	441	211	91	281	115		
	102	270	414	257	100	273	101		
	54	190	228	196	58	161	50		

<sup>&</sup>lt;sup>1</sup>Sum of construction workers during pay periods including 12th of March, May, August, and November.

#### Payroll by State: 1982

July to Sep	ptember	October to	December											
Construction workers1	Hours worked (thousands)	Construction workers1	Hours worked (thousands)		Relative standard error of estimate (percent) for column—								Location of establish- ment	
н	1	J	к	В	С	D	E	F	G	н	L	J	К	ment
53 911	21 779	51 237	20 703	1	1	1	1.	1	1	1	1	1	1	U.S.
849	386	865	349	11	12	12	15	12	14	13	15	12	13	Ala.
436	205	305	136	10	10	11	16	13	14	11	13	11	14	Alaska
1 279	513	1 122	444	7	4	6	6	8	7	7	6	7	5	Ariz.
296	145	416	188	13	13	17	21	15	18	16	17	13	12	Ark.
5 139	1 728	4 904	1 628	2	2	3	4	2	3	2	3	2	3	Calif.
1 693	629	1 627	644	5	4	5	6	5	6	6	6	5	6	Colo.
951	426	957	425	7	7	9	11	7	9	7	9	7	9	Conn.
318	128	323	133	13	9	19	18	10	11	10	11	13	11	Del.
286	104	235	93	19	23	17	24	17	23	24	26	20	25	D.C.
5 710	2 406	5 561	2 369	2	3	2	3	2	3	3	3	3	3	Fla.
2 002 (S) *67 1 053 777	735 (S) *29 410 332	1 744 (S) *137 888 728	667 (S) *57 359 317	8 - 39 8 9	7 - 40 8 9	9 - 34 7 9	9 - 48 10 13	8 - 42 8 9	8 - 47 9 12	10 - 41 8 9	9 - 48 10 12	8 - 50 9 8	52 11 12	Ga. Hawaii Idaho III. Ind.
221	83	205	78	17	18	19	24	18	23	17	23	19	25	lowa
505	197	408	168	18	18	31	35	15	17	17	18	16	19	Kans.
385	151	347	117	14	16	16	20	15	20	15	22	16	20	Ky.
986	372	975	361	9	8	10	12	10	10	9	9	9	10	La.
174	80	116	*55	30	33	21	31	28	39	33	38	34	41	Maine
1 820	781	1 858	813	4	4	5	5	5	5	4	5	5	5	Md.
866	353	748	303	11	12	11	15	12	15	10	13	13	15	Mass.
324	130	344	119	12	14	12	18	13	20	13	20	13	20	Mich.
1 173	443	1 194	443	9	7	7	8	10	9	11	10	11	10	Minn.
261	113	213	90	17	16	16	17	17	19	19	20	20	25	Miss.
1 250	424	1 188	404	7	8	8	10	7	9	8	9	8	9	Mo.
123	48	*296	*128	29	31	26	39	24	38	29	37	50	51	Mont.
297	122	260	105	17	17	17	22	17	21	17	23	18	23	Nebr.
264	122	307	145	9	9	5	7	5	6	6	6	26	28	Nev.
289	141	250	139	14	16	14	20	13	19	15	19	16	19	N.H.
1 329	543	1 243	504	8	· 7	9	10	9	9	8	9	8	9	N.J.
697	252	601	209	14	16	14	18	16	20	15	20	15	20	N. Mex.
1 707	743	1 587	681	7	7	8	10	7	8	8	8	8	8	N.Y.
1 461	661	1 353	621	6	6	6	8	6	7	6	8	7	8	N.C.
116	50	109	45	24	26	22	29	24	30	24	30	26	32	N. Dak.
1 247	500	1 125	463	8	7	9	9	9	9	9	10	8	9	Ohio
942	414	820	371	11	10	14	14	11	12	11	11	13	13	Okla.
454	178	390	151	9	9	11	15	10	13	9	13	9	13	Oreg.
1 799	776	1 605	696	9	7	9	9	9	8	9	8	8	8	Pa.
329	138	380	152	13	14	10	14	11	15	13	17	17	21	R.I.
788 (S) 1 254 6 895 591	310 (S) 491 2 933 204	690 (S) 1 260 6 628 531	261 (S) 474 2 831 169	21 - 9 3 11	17 - 8 3 10	16 - 10 3 11	15 10 3 14	14 - 8 3 14	15 - 9 3 14	30 - 9 3 13	24 - 10 3 15	26 - 11 2 12	22 - 10 3 14	S.C. S. Dak. Tenn. Tex. Utah
181 2 087 1 281 326 269 213	88 879 498 130 104 70	148 2 111 1 319 249 261 148	80 870 503 103 108 49	30 5 5 19 14 18	31 6 5 20 16 24	32 11 6 20 14 18	43 13 8 27 21 27	32 5 7 21 14 16	37 6 8 25 20 28	30 6 5 20 13	34 7 7 23 18 33	30 6 6 20 15 19	35 7 7 26 20 35	Vt. Va. Wash. W. Va. Wis. Wyo.

#### Table 10. Construction Receipts for Establishments With Payroll by Location of Construction Work: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

				•	<u> </u>					
Location of construction work		establishmer	work done by its located in State	establishmen	work done by ts not located State	1977 construction	Percent change 1982/	error (pe	of estin	nate
		Number	Construction receipts	Number	Construction receipts	receipts for work done in this State	1977 (col A÷F)		Jidiiii—	
	А	В	С	D	Е	F	G	Α	С	Е
United States	15 607 430	13 757	14 787 406	822	820 024	19 812 272	-21.2	1	1	2
Alabama	121 921 73 868 645 118 59 018 2 474 104	233 95 259 98 1 372	119 021 (D) 627 561 52 577 2 456 238	*18 *4 14 *10 44	*2 899 (D) 17 556 6 440 17 866	258 896 41 170 579 934 138 536 4 246 685	-52.9 79.4 11.2 -57.4 -41.7	8 10 2 9 1	8 - 2 9 1	49 - 5 27 2
Colorado Connecticut Delaware District of Columbia Florida	837 146 118 666 43 339 19 304 2 004 263	405 256 34 19 1 313	784 434 111 797 (D) 10 133 1 980 556	21 *4 3 7 21	52 712 6 869 (D) 9 171 23 707	648 063 283 830 40 393 46 157 1 305 241	29.2 -58.2 7.3 -58.2 53.6	2 8 10 10	2 9 - 20 1	(W) 15 (W) 6
Georgia Hawaii Idaho Illinois Indiana	370 267 57 029 18 349 290 963 137 808	510 19 42 311 249	367 522 56 885 16 969 278 438 124 218	*9 *3 *11 25 20	2 745 *144 *1 380 12 524 13 590	342 236 136 776 74 158 933 459 273 237	8.2 -58.3 -75.3 -68.8 -49.6	5 3 30 5 7	5 32 5 8	6 69 51 24 16
lowa Kansas Kentucky	53 709 93 620 99 982 158 271 46 966	95 182 155 260 47	51 341 92 787 (D) 155 898 (D)	*11 14 *6 18 *10	2 367 *833 (D) *2 373 (D)	129 838 132 404 165 834 290 757 38 809	-58.6 -29.3 -39.7 -45.6 21.0	14 11 8 6 13	15 11 - 6 -	4 66 - 42 -
Maryland	527 385 138 191 102 917 246 393 37 433	257 279 245 261 67	489 490 (D) 93 477 (D) (D)	34 13 *12 1 22	37 895 (D) · 9 440 (D) (D)	523 349 153 791 369 015 301 979 106 613	.8 -10.1 -72.1 -18.4 -64.9	2 7 8 4 15	2 - 8 - -	2 15 -
Missouri	161 552 15 331 61 560 142 772 46 953	215 44 116 52 81	155 326 (D) 61 245 94 105 40 396	17 *2 *10 37 *13	*6 226 (D) *314 48 667 6 557	282 897 67 856 122 188 190 479 88 527	-42.9 -77.4 -49.6 -25.0 -47.0	6 21 16 3 16	6 16 5 18	51 64 3 37
New Jersey	366 409 90 974 443 096 302 657 37 646	492 174 524 427 24	(D) 83 589 390 294 289 944 20 067	14 11 60 27 6	(D) 7 384 52 801 12 712 17 578	474 109 118 654 479 228 375 225 77 725	-22.7 -23.3 -7.5 -19.3 -51.6	4 10 4 5 8	11 4 5 15	30 8 6 (W)
Ohio Oklahoma Oregon Pennsylvania Rhode Island	360 644 188 516 105 187 268 883 28 176	379 290 205 329 51	282 467 181 278 101 762 243 357 28 158	18 16 *6 27 *5	78 176 7 238 (S) 25 526 (S)	782 193 142 446 243 324 494 627 37 218	-53.9 32.3 -56.8 -45.6 -24.3	4 8 10 4 16	5 8 10 4 16	6 6 - 2 -
South Carolina	135 870 6 082 160 687 2 690 819 74 688	166 12 309 1 517 119	109 576 6 064 155 109 2 617 881 73 320	43 *5 *10 27 *9	26 294 (S) (S) 72 937 *1 368	147 884 31 449 289 278 1 877 638 178 051	-8.1 -80.7 -44.5 43.3 -58.1	7 23 9 1 11	9 23 6 1 11	17 - - 1 73
Vermont Virginia Washington West Virginia Wisconsin Wyoming	19 429 657 242 322 314 24 090 63 257 56 542	51 465 390 96 102 54	(D) 536 489 302 884 20 473 61 989 47 171	*6 39 28 *8 *40 *10	(D) 120 753 19 429 3 617 1 268 9 371	16 947 847 420 559 462 87 792 188 465 50 068	14.6 -22.4 -42.4 -72.6 -66.4 12.9	28 3 4 13 11 10	3 5 15 11 12	5 7 (W) 21 (W)

# Table 11. All Business Receipts for Establishments With Payroll by Kind of Business Activity: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activities	All busines	Relative standard error of estimate (percent)		
	1982	1977	1982	1977
All kinds of business.	18 084 627	22 917 960	1	1
General building contractor	553 220 14 954 729	952 238 19 010 846	3	3
General building contractor	158 021 143 934	(NA) 442 098	3	(NA) 6
		38 763	13	6
Carpentry contractor Residential remodeling contractor Real estate agents and managers	35 094 63 684 106 386	26 944 (NA) 167 074	8 5	(NA)
Retail tradeSale of land	81 411 578 225	42 055 1 241 460	2	15 6
Other activities	1 376 012	972 689	2	6

## Table 12. Profile of Establishments With Payroll in This Industry: 1982 and Earlier Census Years

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]				
Selected statistics	1982	1977	1972	Relative standard error of estimate (percent) for 1982
AVERAGE PER ESTABLISHMENT				
Number of employees** Number of construction workers Number of all other employees	7.7 3.8 3.7 133.3 50.5 82.8	7.4 4.7 2.5 86.3 44.9 41.4	(S) (S) (S) (S) (S)	1 1 1 1 1
All business receipts	1 286.9 1 110.6 268.7 481.5 18.0 228.0	976.2 843.9 250.1 391.2 29.7 115.6	(S) (S) (S) (S) (S)	1 1 1 1 1
AVERAGE PER EMPLOYEE  Payroll, all employees	17.4 168.0 51.0	11.7 131.9 30.1	(S) (S) (S)	1 1 1
AVERAGE PER CONSTRUCTION WORKER				
Construction worker wages do Total construction receipts do Construction worker hours thousand.	13.3 293.3 1.6	9.6 180.6 (NA)	(S) (S) (NA)	1 1 1
AVERAGE PER OTHER EMPLOYEE				
Other employee salaries\$1,000	22.5	16.4	(S)	1
AVERAGE PER DOLLAR OF TOTAL CONSTRUCTION RECEIPTS				
Payroll, all employees Payments for materials, components, supplies, and fuels Payments for construction work subcontracted to others Capital expenditures, other than land Rental payments for machinery, equipment, and structures	.120 .242 .434 .016 .006	.102 .296 .464 .035 .003	(S) (S) (S) (S) (NA)	1 1 1 1

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1982

						Average per do	llar of total cons	struction receipts	3
Location of establishment	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker (thousands)	Total construction receipts per construction worker (\$1,000)	Payroll, all employees	Payments for materials, components, supplies, and fuels	Payments for construction work sub- contracted to others	Capital expenditures, other than land	Rental payments for machinery, equipment, and structures
United States	<b>7</b> .7	17.4	1.6	<b>2</b> 93.3	.120	.242	.434	.016	.006
Alabama	6.1 4.4 12.5 5.2 10.4	12.7 20.1 19.6 13.6 23.2	1.7 1.8 1.6 1.8 1.3	152.9 211.4 497.3 172.4 504.0	.145 .126 .103 .133 .130	.353 .467 .120 .271 .112	.418 .373 .516 .303 .527	.013 .021 .009 .015 .020	.004 .005 .008 .003 .008
Colorado	8.2 5.6 9.9 17.1 10.7	21.3 15.4 18.4 21.9 15.9	1.5 1.8 1.6 1.5	464.1 128.8 131.6 198.1 341.3	.092 .178 .181 .208 .112	.246 .330 .229 (D) .211	.417 .369 .438 .598 .460	.008 .009 .014 .022 .024	.006 .004 .005 (D) .006
Georgia Hawaii Idaho Illinois Indiana	6.5 (S) 5.2 6.6 4.9	12.9 (S) 11.1 20.1 15.5	1.5 (S) *1.6 1.5 1.7	200.7 (S) 180.9 307.2 177.9	.114 (S) .143 .143 .147	.347 (D) .301 .252 .399	.375 (S) .352 .447 .358	.008 (S) .004 .007 .058	.003 (S) .002 .006 .005
lowaKansasKentuckyMaine	4.8 4.6 5.0 6.4 6.1	16.8 12.9 13.4 15.3 11.8	1.3 1.6 1.4 1.5 1.7	218.1 194.4 242.7 161.4 168.1	.149 .107 .104 .165 .153	.316 .347 .232 .375 .278	.326 .452 .441 .319 *.517	.018 .014 .005 .013	.004 .004 .003 .005
Maryland	13.1 4.6 3.2 7.3 5.5	21.1 14.2 17.7 18.3 11.1	1.7 1.6 1.4 1.5 1.6	393.4 172.0 244.9 221.2 134.4	.105 .143 .145 .138 .134	.179 .272 .277 .258 .403	.492 .400 .405 .457 .278	.024 .021 .012 .010	.011 .002 .006 .007
Missouri	8.2 4.2 4.2 10.2 5.0	18.0 12.5 16.0 22.9 17.8	1.3 1.7 1.6 1.8 1.9	174.9 107.0 213.4 359.2 171.6	.166 .162 .128 .120 .163	.244 .214 .348 (D) .347	.437 .314 .445 .648 .446	.018 *.041 .017 .006 .009	.004 .005 .006 .014
New Jersey	5.3 6.0 6.7 6.6 8.6	17.5 12.8 16.2 13.2 12.7	1.5 1.4 1.7 1.7 1.6	308.1 128.9 250.6 216.2 188.9	.118 .161 .141 .118 .124	.248 .258 .267 .470 .306	.419 .373 .449 .340 .140	.028 .014 .010 .020 .021	.002 .006 .004 .003
Ohio	5.4 5.1 4.3 8.4 9.7	16.7 15.8 17.5 13.7 11.6	1.5 1.7 1.4 1.7 1.6	238.5 203.5 222.4 148.5 81.4	.119 .132 .150 .154 .204	.299 .351 .242 .295 .327	.444 .355 .306 .368 .449	.008 .016 .015 .011 .003	.005 .004 .009 .004
South Carolina	7.9 (S) 6.3 9.4 6.6	14.9 (S) 13.0 17.8 14.5	1.6 (S) 1.5 1.7 1.2	164.5 (S) 128.0 389.5 145.9	.177 (S) .159 .097 .153	.269 (S) .344 .305 .287	.438 (S) .351 .366 .478	.033 (S) .011 .010 .125	.010 (D) .005 .005
Vermont	4.1 8.0 6.0 3.9 5.3 5.6	11.6 15.7 17.1 10.8 16.2 18.1	1.9 1.6 1.5 1.6 1.5	126.6 264.6 223.7 75.8 229.6 248.3	.129 .108 .130 197 .142	.463 .282 .228 .428 .281	.253 .443 .332 .225 .357 .349	.007 .005 .011 .008 .069	.004 .007 .008 .004 .005

# APPENDIX A. Expianation of Terms

Construction—Is composed of three broad categories: (1) new construction, (2) additions and alterations, and (3) maintenance and repair. "New construction" includes the complete, original erection of structures and essential service facilities and the initial installation of integral equipment such as elevators and escalators. "Additions and alterations" includes construction activity making structural changes to existing facilities. "Maintenance and repair" includes the restoration of existing buildings or other structures or their service facilities, including the replacement of integral parts. Repainting, repapering, reroofing, etc., are also included.

#### Construction includes:

- special trade contracting such as electrical work, painting, and carpentering on mobile structures (trailers, mobile homes, and ships).
- support activities by construction contractors on mineral properties, except the following: sinking mine shafts; tunneling and shoring mines; erection, repairing and dismantling of drilling rigs; and building well foundations.
- the physical development of land for purposes other than agriculture.
- · demolition of existing structures.

Construction does not include:

- · shipbuilding.
- · manufacturing of other mobile structures.

Number of establishments in business during year—Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Number of establishments in business at end of year—Includes all full-year or part-year establishments that were in business at the end of 1982.

**Proprietors and working** partners—These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners. The partnership factor was based on information received during a large-scale test conducted in prior years.

All employees—Comprised all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid-sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are excluded.

Total employment is calculated for each establishment and is derived by summing the construction workers data reported for March, May, August, and November, dividing by 4 and adding to it the number of other employees reported for March.

This approach was designed to simplify the questionnaire format and the reporting requirements of respondents. The industry average of these four selected pay periods approximates very closely the average employment for the year that would be obtained by using pay periods in all 12 months for almost all of the construction industries.

Construction workers—Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working supervisor level are excluded from this category but are included in the "other employees" category.

Other employees—Includes employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working supervisor level.

Construction worker hours—Includes the total number of hours worked by construction workers. Construction worker hours were collected for each of the four quarters of 1982 and are published in the detailed statistics tables.

Payroll—Includes the gross earnings paid in the calendar year 1982 to all employees on the payroll of construction establishments. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick-leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if an unincorporated concern.

Payroll data were collected and tabulated for the employment categories described above and separately for the first quarter of 1982.

Payroll data for auxiliary establishments of multiestablishment companies are not included in these totals. Selected data for these types of establishments are found in the industry summary report and the 1982 Enterprise Statistics reports.

Employer costs for fringe benefits—Represents expenditures made by the employer during 1982 for legally required and voluntary fringe benefit programs for employees. These include employers' Social Security contributions, unemployment compensation, workers' compensation, State temporary disability payments, union negotiated benefits, life insurance premiums, pension plans, insurance premiums on hospital and medical plans, and welfare plans.

All business receipts—Includes all receipts from general contracting, special trade contracting or subcontracting, and land development and improvement work. It also includes all receipts from the sale of land (not recorded as fixed assets of the reporting establishments) and buildings built for sale. All other receipts from the reporting establishment's other business operations (rental of equipment to others, wholesale or retail sales, etc.) are also included.

Money obtained during the year in the form of construction loans is not treated as receipts, nor is money realized from the sale or other disposition of the establishment's fixed assets.

Also excluded are receipts from operations in foreign countries and nonoperating income such as interest and dividends.

All business receipts are broken down in the following detail:

Total construction receipts—Includes all receipts during 1982 for construction work performed by general contractors, special trades contractors or subcontractors, and for land development and improvement work. Included are receipts for maintenance and repair construction work, as well as for new construction and additions and alterations. Also included is the value of any construction work done by the reporting establishments for themselves.

Builders were instructed to include in this item their 1982 receipts from the sale of buildings and other structures built for sale, excluding from these receipts the value of the land (see ''land receipts'' below) but including the value of any improvements an establishment made to the land. Builders who traded a new home or other building for an existing one were to include the estimated value of the trade-in.

Also included in construction receipts were fees received as sponsors of joint ventures and fees received as agents for owners (for construction work).

Excluded were receipts for separately definable architectural and engineering work done by the reporting establishment for others and receipts from the rental of equipment to others (see "other business receipts" below).

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies for construction purposes were instructed to include as construction receipts both the receipts for the installation and the receipts for the value (selling price) of the items installed. (Receipts for the selling price of items sold but not installed were to be included in "other business receipts.")

Receipts for work subcontracted in from others—Covers receipts during 1982 for work done by reporting establishments for other construction contractors or builders. Establishments were asked to report the approximate percent of total construction receipts accounted for by such work, and the percentages reported were applied to the reported construction receipts to develop a value for this item.

Land receipts—Includes receipts from the sale of land, whether held for sale or sold in connection with the sale of houses and other structures. It excludes the value of any improvements made to the land prior to the sale. (That value was to be included in construction receipts.)

Other business receipts—Includes business receipts not reported as construction receipts or land receipts. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Net construction receipts—Derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

Value added—Derived for each establishment, value added is equal to all business receipts, less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. For SIC 6552 and SIC 1531, for which land receipts are significant, value added is modified to be equal to all business receipts less land receipts; payments for construction work subcontracted to others; and payments for materials, components, supplies, and fuels. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

Selected payments—Represents the total of payments for materials, components, and supplies; payments for construction work subcontracted to others; and payments for selected power, fuels, and lubricants. Capital expenditures and rental payments for machinery, equipment, and structures are shown elsewhere.

Payments for materials, components, and supplies include:

- total payments made by the reporting establishments during 1982 for the purchase of all materials, components, and supplies, except fuels, used for construction. (Supplies include expendable tools charged to current accounts.)
- freight and other direct charges incurred by the reporting establishment in acquiring the materials, components, and supplies are also included, as are the value of materials, components, and supplies obtained from other establishments of the respondent's company. Payments represent the amount paid after discounts.
- payments for materials, components, and supplies used by the reporting establishments in the construction of new plants or equipment for themselves, which are chargeable to their fixed assets accounts, are included in this item as are payments for materials bought and resold to others.
- payments made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Payments for materials, components, and supplies include only payments for physical goods and represent the amount paid after discounts.

Excluded from this item are:

- services such as advertising, telephone, telegraph and cable, insurance, developmental and research services of engineering, management, marketing, and other professional consultants, unless their costs are included in the prices paid for materials.
- overhead items such as depreciation charges against plant and equipment, rent and rental allowances, interest payments, royalties, patent fees, payments for land, rental of construction machinery or equipment, and construction work let out to other construction contractors.
- materials furnished to contractors by the owners of projects.

Payments for construction work subcontracted to others include:

- all payments made during 1982 for construction work subcontracted out to other construction contractors.
   General contractors were instructed to include payments to subcontractors. Builders were instructed to include payments made to general contractors and also payments made directly to subcontractors.
- special trade contractors were instructed to include payments made to other subcontractors. The payments made by the reporting establishment for its purchases of materials, components, and supplies are not included here, even if they were provided to a subcontractor for his use. Such purchases are reported under a separate category, "payments for materials, components, and supplies." However, if payments to subcontractors covered materials purchased directly by the subcontractors, then the total of such payments (including material charges) should have been reported in this item.

Excluded from this item are:

 payments made for the rental of construction machinery or equipment.

Payments for selected power, fuels, and lubricants include:

- payments made for fuels, lubricants, and electric energy purchased during the year from other companies, or received from other establishments of the parent company.
- payments made for natural and manufactured gas, fuel oil, coal and coke products, etc.

Dollar amounts include freight and other direct charges.

Storage capacity for fuels — Data for storage capacity for fuels were collected from heavy construction contractors, other than building construction contractors. Data are published in the detailed statistics tables for the heavy construction industries, i.e., SIC 1611, SIC 1622, SIC 1623, and SIC 1629.

Rental payments for machinery, equipment, and structures—Includes all payments made during 1982 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes payments for the rental of land. It also excludes payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized. Such payments are included in "capital expenditures." It also excludes payments made under agreements which, in effect, are true subcontract construction arrangements; such payments are included in payments for "construction work subcontracted to others."

Selected purchased services — Includes all payments made during 1982 for communication services purchased from other companies or from other establishments of the parent company. It also includes the cost of all repairs made to structures and equipment by outside firms, or from other establishments of the parent companies. It includes only the cost of that repair necessary to maintain property and equipment. It excludes the cost of improvements that increases the value of property, or the cost of adapting it for another use.

Fixed assets and depreciation—Refers to the value of all fixed tangible assets such as buildings and other structures (offices, shops, etc.); stationary machinery (generators, shop equipment, etc.); mobile machinery (tractors, trucks, etc.); and other equipment (office furniture and fixtures, etc.). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on fixed assets and depreciation were collected separately for: (1) structures, additions, and related facilities; (2) machinery and equipment; and (3) the total of both.

Respondents were asked to report the gross book valueacquisition cost (original cost or other basis) at the beginning and at the end of 1982. They were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, destroyed, etc., during 1982.

Capital expenditures—Refers to all costs actually incurred during 1982 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment. Included are payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized.

Respondents were instructed not to include any expenditures actually made prior to, or after 1982. For example, if they began construction of a building for an establishment's own use before 1982 and did not complete it until after 1982, they were to report only those costs actually incurred during 1982.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

- New structures and related facilities—Includes the
  total expenditures during 1982 for new buildings and
  structures, major additions and alterations to
  buildings and structures, and other facilities for the
  reporting establishment's use (such as roads, docks,
  tracks, parking lots, and fences). It excludes expenditures for land.
- New machinery and equipment—Includes expenditures for new machinery and new equipment. This item also includes capitalized repairs and improvements to used machinery and equipment.
- New automobiles and trucks intended primarily for highway use—Includes expenditures for new automobiles and trucks and capitalized repairs and improvements to used automobiles and trucks.
- Used structures and related facilities—Covers expenditures for used structures and related facilities acquired from others.
- Used machinery and equipment—Includes expenditures for used machinery and equipment acquired from others, including automobiles and trucks.
   Capitalized repairs and improvements to such equipment are reported as new machinery and equipment.

Value of inventories—Includes all of the materials and supplies that are owned and located within the United States. Excludes materials which are owned by others, but held by the reporting establishment.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Establishments building structures on their own land for sale (operative builders) were instructed to include the value of materials on hand at the end of the year but not to include the structures not yet sold or under construction.

Land subdividers and developers were instructed to include the value of materials on hand at the end of the year, but not include land not yet sold or under construction.

Ownership of construction projects—This item shows the distribution of construction receipts by ownership of the project—Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken and not to the financing. Government owned projects cover those owned by the Federal, Commonwealth, or local governments including public authorities and special districts.

Types of construction—This item provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1982. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. However, complex projects consisting of two or more types of buildings, structures, or other facilities are difficult to classify because sufficient information is seldom available. Therefore, respondents were told to classify complex projects by the major function of the total complex.

In addition, heavy construction contractors and special trade contractors were requested to report the percentage of construction receipts derived from new construction work, including additions and alterations, and from maintenance and repair work for each of these types. General building contractors were requested to report the percentage of construction receipts derived from new construction work, from additions and alterations, and from maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of new construction, additions and alterations, and maintenance and repair.

# Building construction:

- Single-family houses, detached—Includes all residential buildings constructed for one family use.
- Single-family houses, attached (includes townhouses)—Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- Apartment buildings with two or more apartments— Includes high-rise, low-rise, or any structures other than containing two or more housing units.
- Other residential buildings—Includes hotels, motels, dormitories, and other nonhousekeeping residential structures.
- Bank buildings and other financial institutions— Includes all buildings which are used primarily to house banks or other financial institutions.
- Warehouses—Includes commercial warehouses, cold storage plants, grain elevators, miniwarehouses, and other storage buildings.
- Farm buildings, nonresidential Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- Industrial buildings—Includes all industrial buildings and plants which are used to house production and assembly activities. Note that heavy industrial facilities such as blast furnaces, petroleum refineries, chemical complexes, etc., are NOT included in this category, but are shown under nonbuilding construction.
- Office buildings—Includes all buildings which are used primarily for office space or for government administrative offices.
- Other commercial buildings such as stores, restaurants, and automobile service stations— Includes all buildings which are intended for use primarily in the wholesale, retail, and service trades.
   For example, complete shopping centers, department stores, drug stores, restaurants, public garages, and auto service stations.
- Religious buildings—Includes all buildings which are intended for religious services or functions, such as churches, synagogues, convents, monasteries, and seminaries.

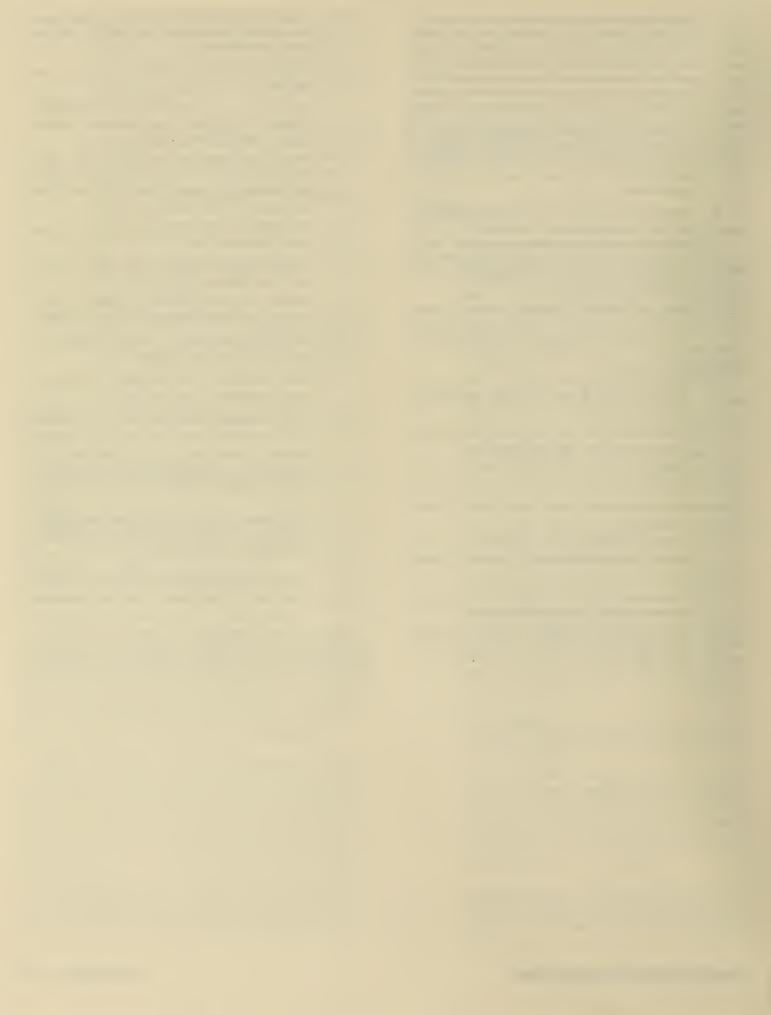
- Educational buildings Includes all buildings which are used directly in administrative and instructional activities, such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums and art galleries, as well as laboratories which are not a part of a manufacturing establishment, are also included.
- Hospitals and institutional buildings—Includes all buildings which are intended to provide hospital and institutional care, such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- Amusement, social, and recreational buildings— Includes buildings which are used primarily for entertainment, social, and recreational activities, such as sports arenas, theaters, music halls, golf and country club buildings, skating rinks, bowling alleys, and indoor swimming pools.
- Other nonresidential buildings—Includes buildings which are not classified elsewhere, such as fire stations, bus and air passenger terminals, hangars, etc.

#### Nonbuilding construction:

- Outdoor swimming pools—Includes wading pools and reflecting pools.
- Elevated highways—Includes roads, highways, and causeways built on structural supports.
- Bridges—Includes viaducts, trestles, and overpasses.
- Tunnels Includes highway, pedestrian, and railway tunnels, etc.
- Railroad construction—Includes the construction of railroad beds, tracks, freight yards, and signal towers.
- Subway construction—Includes urban mass transit subway systems above or below ground.
- Dam and reservoir construction—Includes hydroelectric, water supply, and flood control dams and reservoirs.

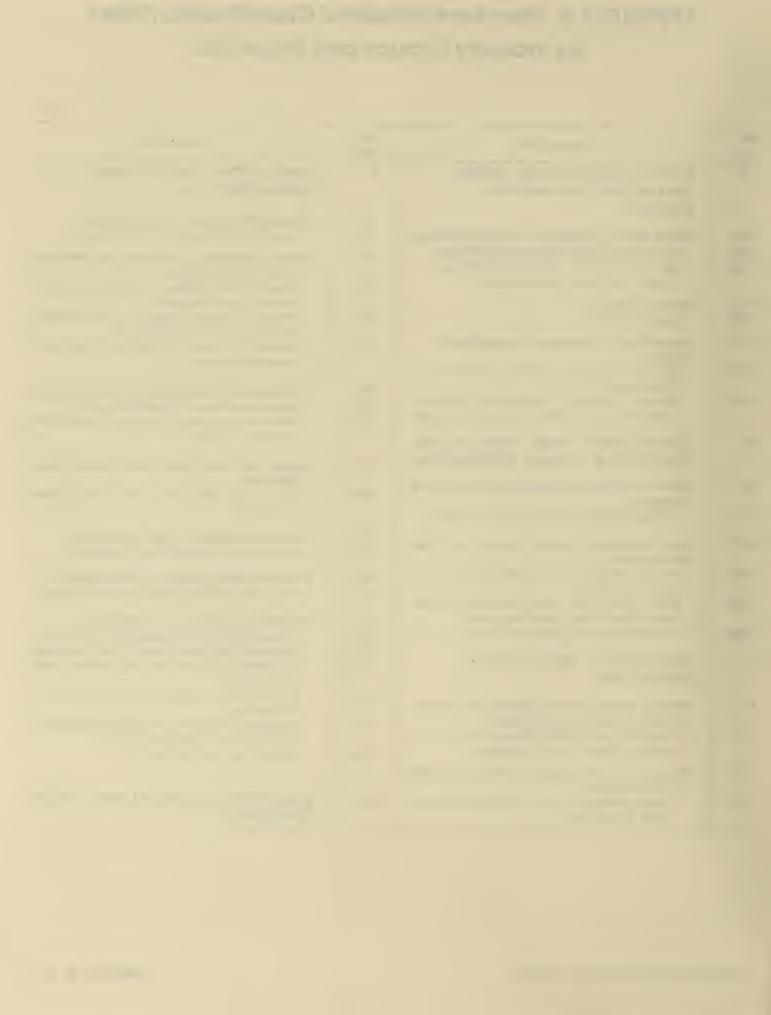
- Marine construction—Includes dredging, underwater rock removal, breakwaters, navigational channels, jetties, and locks.
- Harbor and port facilities Includes docks, piers, and wharves.
- Conservation and development construction— Includes land reclamation, irrigation projects, drainage canals, dikes, and levees.
- Power and communication transmission lines, towers, and related facilities—Includes telephone and telegraph lines, television and radio towers, electric light and power facilities.
- Power plants, except nuclear Includes electric and steam generating plants.
- Power plants, nuclear—Includes atomic energy plants and nuclear reactors.
- Sewers, sewerlines, and related facilities—Includes sanitary and storm sewers and related facilities.
- Sewage treatment plants—Includes sewage treatment and waste disposal plants.
- Water mains and related facilities—Includes water supply systems and related facilities.
- Water treatment plants—Includes water filtration and water softening plants.
- Pipeline construction other than sewer or waterlines—Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- Blast furnaces, petroleum refineries, chemical complexes, etc.—Includes coke ovens, and mining appurtenances such as tipples and washeries.
- Other nonbuilding construction Includes all types of nonbuilding construction, not included elsewhere.

Location of construction work—This item includes data for each State in which respondents engaged in construction work and the extent (percent of construction receipts) of that work.



# APPENDIX B. Standard Industrial Classification Titles for Industry Groups and Industries

SIC		SIC	
code	Industry titles	code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL	17	CONSTRUCTION—SPECIAL TRADE
	CONTRACTORS AND OPERATIVE		CONTRACTORS—Con.
	BUILDERS	173	Electrical Work Special Trade Contractors
152	General Building Contractors — Residential Buildings	1731	Electrical Work Special Trade Contractors
1521 1522	General Contractors — Single-Family Houses General Contractors — Residential Buildings,	174	Masonry, Stonework, Tile Setting, and Plastering
	Other Than Single-Family Houses	1741	Special Trade Contractors  Masonry, Stone Setting, and Other Stonework
153	Operative Builders	1/41	Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical and Insulation
154	General Building Contractors - Nonresidential	1743	Work Special Trade Contractors Terrazzo, Tile, Marble, and Mosaic Work Special
1541	Buildings   General Contractors—Industrial Buildings and		Trade Contractors
	Warehouses	175	Carpentering and Flooring Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentering Special Trade Contractors
		1752	Floor Laying and Other Floorwork Special Trade Contractors, N.E.C.
16	CONSTRUCTION OTHER THAN BUILDING		Contractors, N.E.C.
	CONTRUCTION—GENERAL CONTRACTORS	176	Roofing and Sheet Metal Work Special Trade
161	Highway and Street Construction, Except Elevated Highways	1761	Contractors Roofing and Sheet Metal Work Special Trade
1611	Highway and Street Construction Contractors		Contractors
162	Heavy Construction, Except Highway and Street	177	Concrete Work Special Trade Contractors
102	Construction Except Highway and Street	1771	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construc-	178	Water Well Drilling Special Trade Contractors
1623	tion Contractors Water, Sewer, Pipe Line, Communication and	1781	Water Well Drilling Special Trade Contractors
	Power Line Construction Contractors	179	Miscellaneous Special Trade Contractors
1629	Heavy Construction Contractors, N.E.C.	1791	Structural Steel Erection Special Trade Contractors
17	CONSTRUCTION-SPECIAL TRADE	1793 1794	Glass and Glazing Work Special Trade Contractors Excavating and Foundation Work Special Trade
	CONTRACTORS		Contractors
171	Plumbing, Heating (Except Electric), and Air Con-	1795	Wrecking and Demolition Work Special Trade Contractors
1711	ditioning Special Trade Contractors Plumbing, Heating (Except Electric), and Air Con-	1796	Installation or Erection of Building Equipment
.,,,	ditioning Special Trade Contractors	1799	Special Trade Contractors, N.E.C. Special Trade Contractors, N.E.C.
172	Painting, Paper Hanging, and Decorating Special	1/33	Special Hade Contractors, N.E.C.
1704	Trade Contractors	0550	CURDIVIDERS AND DEVELOPERS EVOERT
1721	Painting, Paper Hanging, and Decorating Special Trade Contractors	6552	SUBDIVIDERS AND DEVELOPERS, EXCEPT CEMETERIES
		I	



# APPENDIX C. Geographic Divisions and States

# **NEW ENGLAND STATES**

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

# MIDDLE ATLANTIC STATES

New Jersey New York Pennsylvania

# **EAST NORTH CENTRAL STATES**

Illinois Indiana Michigan Ohio Wisconsin

# **WEST NORTH CENTRAL STATES**

Iowa Kansas Minnesota Missouri Nebraska North Dakota South Dakota

# **SOUTH ATLANTIC STATES**

Delaware District of Columbia Florida Georgia Maryland

# SOUTH ATLANTIC STATES-Con.

North Carolina South Carolina Virginia West Virginia

# **EAST SOUTH CENTRAL STATES**

Alabama Kentucky Mississippi Tennessee

# WEST SOUTH CENTRAL STATES

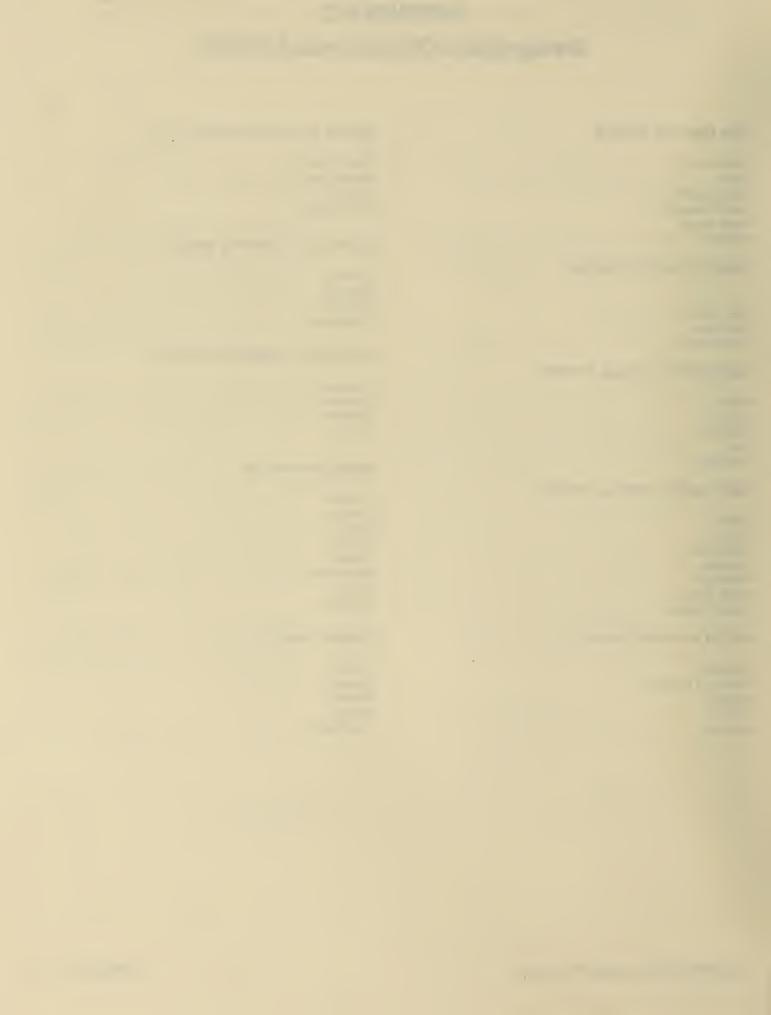
Arkansas Louisiana Oklahoma Texas

#### **MOUNTAIN STATES**

Arizona Colorado Idaho Montana Nevada New Mexico Utah Wyoming

# **PACIFIC STATES**

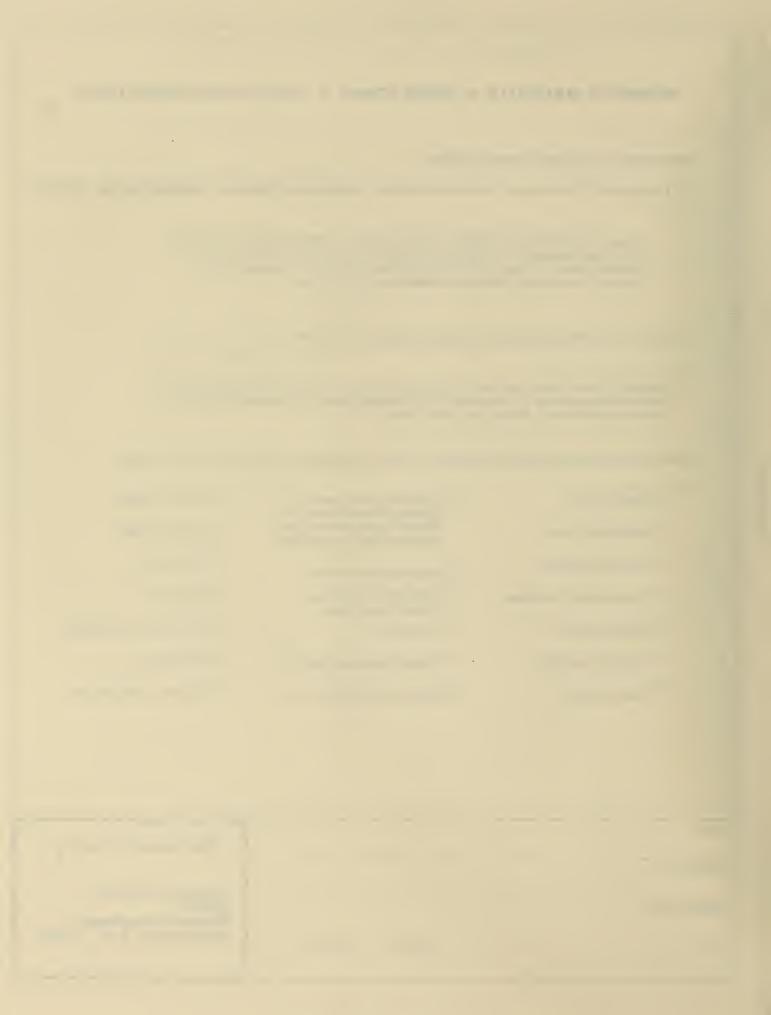
Alaska California Hawaii Oregon Washington



# TEAR HERE

# REFERENCE MATERIALS • ORDER FORMS • PUBLICATION CORRECTIONS

	Please send me the items marked (X) below.							
_								
	☐ Corrections (if there are any) for this publication—Construction Industries, Operative Builders, CC82-I-3							
	If you purchase several different reports from the 1982 Economic Censuses, you should complete this form from each of the reports and return it to the address shown below to receive publication corrections. However, you should complete the following on <b>only</b> one of the forms.							
	☐ Guide to the 1982 Economic Censuses and Related Statistics							
	☐ Monthly Product Announcement — A monthly notice of all products released by the Census Bureau during the previous month—useful primarily to persons who plan to purchase publications, tapes, etc., in the future.							
	Publication announcements and order forms — Mark (X) subjects in which you are interested.							
	Retail Trade	☐ Economic Censuses of	Governments					
	☐ Wholesale Trade	Outlying Areas (Puerto Rico, Guam, Virgin Islands, and Northern Mariana Islands)	☐ Foreign Trade					
	☐ Service Industries	☐ Enterprise Statistics	☐ Population					
	☐ Construction Industries	Minority- and Women- Owned Businesses	Housing					
	Manufacturing	☐ Agriculture	☐ International Statistics					
	☐ Mineral Industries	County Business Patterns	☐ Geography					
	☐ Transportation	☐ Quarterly Financial Report	☐ Guides, Catalogs, etc.					
Name								
			Mail completed form to					
Organi	zation		Customer Services					
Addres	ss/PO Box	DUSD Bureau of the Census						
City		State ZIP Code	Washington, D.C. 20233					



# County and City Data Book, 1983

# 10th Edition

A must for . . .

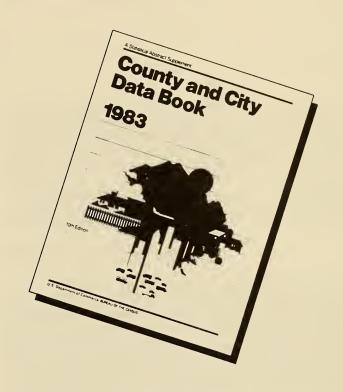
Market researchersEconomistsBusiness analystsTeachersLegislatorsLibrariansSocial scientistsStudents

Planners ... The list is endless

The County and City Data Book, 1983, is an indispensable reference to social and economic data on States, counties, cities, and places, all in one compact volume. It contains information on a variety of subjects, including population, age distribution, educational attainment, money and personal income, housing value and ownership, births, deaths, poverty, local and city government finance and employment, health care, human services, business, banking, climate, elections, and social programs. Many new data items are presented for the first time in the Data Book, including nurses, nursing homes, Medicare, journey to work, workers in families, and Moody's bond ratings. Also featured are rankings of selected socioeconomic measures for cities and counties.

The County and City Data Book, 1983, holds 1,064 factfilled pages on the entire United States; 50 States; and the District of Columbia; census regions; 9 census divisions; 3,137 counties and county equivalents; 945 incorporated cities with 25,000 or more inhabitants; and approximately 10,000 places, towns, and townships of 2,500 or more inhabitants in 1980.

It presents 216 data items for regions, divisions, States, counties, and county equivalents; 170 items for cities with 25,000 or more inhabitants in 1980; and 15 items for places with 2,500 or more inhabitants in 1980; and 15 items for towns and townships of 2,500 or more in 11 States.



The County and City Data Book, 1983, is an invaluable guide to your data needs and to the needs of your organization.

Use the GPO order form below to order your copy today. \$24 (clothbound.)

An outline of the table headings showing the data included in this volume can be obtained at no charge. Also, computer tapes and diskettes containing the data are also available for purchase. For additional information, call 301/763-1034, or write:

Chief, Data User Services Division U.S. Bureau of the Census Washington, D.C. 20233

Make check SUPERINT County and S/N 003-02- Enclosed is	Month/Year Month/Year	
r or type	SHIP TO:  Company or personal name  Additional address/attention line	Enclosed To be mailed Subscriptions Postage Foreign handling MMOB OPNR UPNS Discount
LEASE PRINT	Street address  City State ZIP code  (or Country)	



# **PUBLICATION PROGRAM**

# 1982 CENSUS OF CONSTRUCTION INDUSTRIES

Publications of the 1982 Census of Construction Industries, containing data on construction establishments in the United States, are described below. Publications order forms for the specific reports may be obtained from any Department of Commerce district office or from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

# **Preliminary Reports**

Preliminary data from the 1982 census have been issued in 27 industry reports and 1 summary report. These reports are superseded by more detailed final reports.

# **Final Reports**

Final detailed statistics are issued in separate paperbound reports.

# Industry series - 28 reports (CC82-I-1 to -28)

Industry series — 27 reports (CC82-I-1 to -27). These reports present data for establishments with payroll and are published for each of the 27 industries included in the census. Each industry report presents 1982 data by State and for the United States on number of construction establishments; receipts; employment; hours worked; payrolls; payments to subcontractors; payments for materials, components, and supplies; payments for power and fuels; payments for selected purchased services; payments for the rental of machinery, equipment, and structures; value added; capital expenditures during the year; and depreciable assets. Limited data for 1977, 1972, and 1967 are also shown. In addition, more detailed data are shown at the U.S. level on construction receipts by type of structure (single-family houses, streets, roads, etc.). Selected data also are provided for establishments classified by their employment size and receipts size.

U.S. Summary—1 report (CC82-I-28). This report summarizes the data for establishments with payroll presented in the 27 individual industry reports and presents limited data for establishments with no payroll.

# Geographic area series - 10 reports (CC82-A-1 to -10)

Division reports (CC82-A-1 to -9). These reports are published for States grouped according to the nine census geographic divisions. Much of the geographic area series data are the same as presented in the

industry series, except here they are organized by State rather than by industry. Similar data also are presented for selected SMSA's. Data are provided for establishments classified by their employment size and receipts size. Data for establishments with no payroll as well as comparative 1977, 1972, and 1967 figures, on a limited basis, also are shown.

U.S. Summary by State (CC82-A-10). This report summarizes the data, as presented in the nine individual geographic division reports, for establishments with and without payroll.

# Special series - 1 report (CC82-SP-1)

Legal form of organization and type of operation (CC82-SP-1) — This report presents limited data (number of establishments, number of proprietors and working partners, total employment, and total receipts) for construction establishments without payroll, for construction establishments with payroll, and for the aggregate, classified by industry and by legal form of organization. It also contains selected statistics (number of establishments, employment, payrolls, receipts, payments to subcontractors, net construction receipts, and value added) for construction establishments with payroll, classified by industry and by type of operation (multiunit or single-unit) and by legal form of organization.

# **Final Report Volume**

Final paperbound reports subsequently are assembled and reissued in one clothbound volume.

### Microfiche

All published data also are available on microfiche.

#### OTHER ECONOMIC CENSUSES REPORTS

Data on retail trade, wholesale trade, service industries, manufactures, enterprise statistics, minority-owned businesses, women-owned businesses, and transportation also are issued as part of the 1982 Economic Censuses. A separate series of reports covers the censuses of outlying areas—Puerto Rico, Virgin Islands of the United States, Guam, and the Northern Mariana Islands. All published reports and microfiche are sold by the Superintendent of Documents, U.S. Government Printing Office. Appropriate announcements and order forms describing these products are available free of charge from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

Superintendent of Documents U.S. Government Printing Office Washington, D.C. 20402

Official Business
Penalty for Private Use, \$300



POSTAGE AND FEES PAID U.S. DEPARTMENT OF COMMERCE COM-202

Special Fourth-Class
Rate-Book









JUL

